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Current Notes

Vol. 8 No. 9 November 1988

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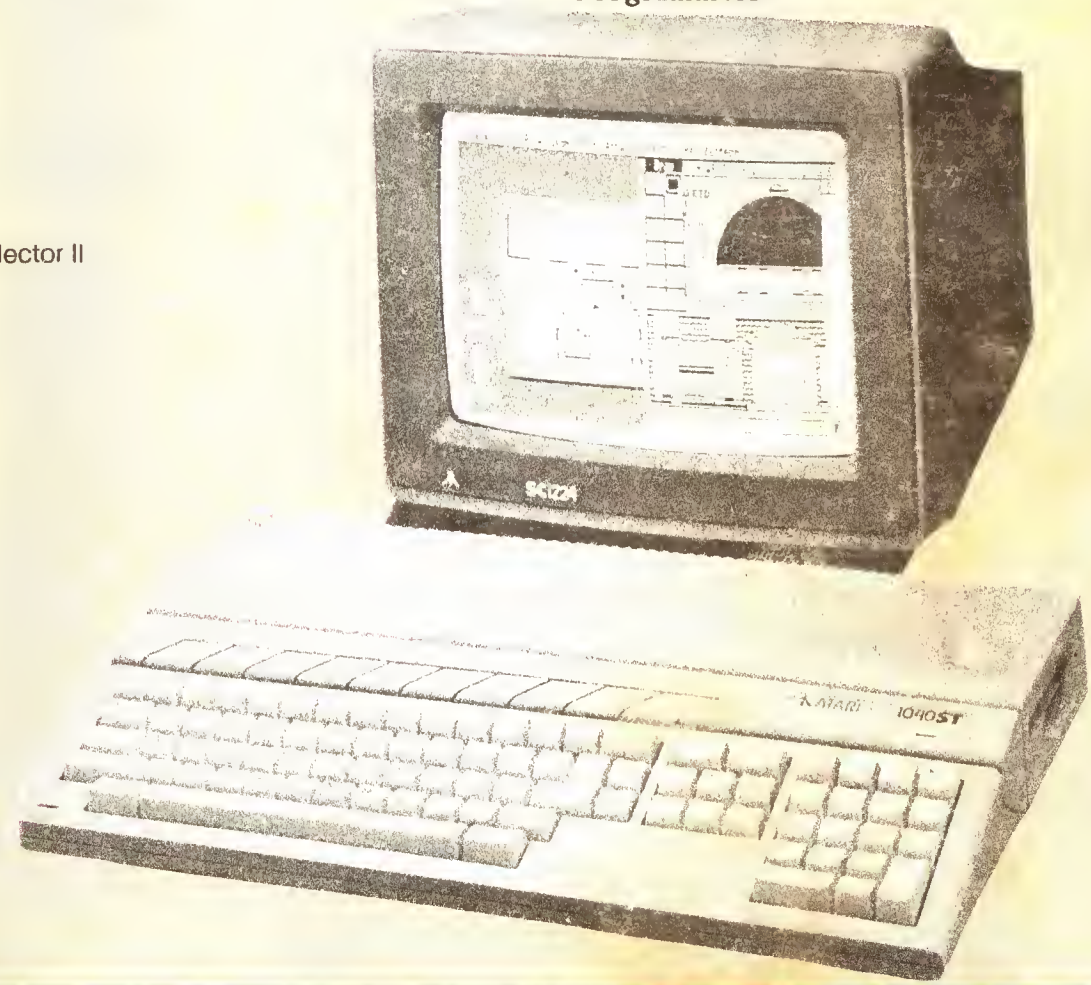

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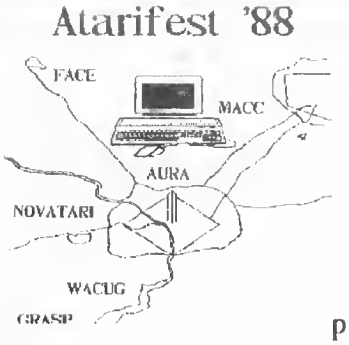

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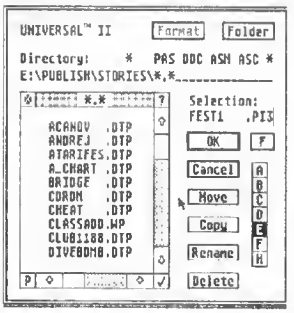

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KEY:
- □ ST-related review or article.
- ■ XE/XL related review or article.
- • Machine independent article.

From the Editor's Desk:

Last month I warned of trouble in Atariland and said I would offer some suggestions this month. Unlike some Atari critics, however, I am well aware that Jack Tramiel did not need any advice from CN when he made his first million, or his second million either for that matter. But we all, Atari owners young and old, have a stake in Atari's future and would love to see Atari computers flourish. To that end, starting with the first issue in 1989, CN will explore the question, "What will it take for Atari to succeed in the 1990's?"

We plan to offer opinions from a variety of sources: software developers, publishers, retail store owners, user group representatives, and, of course, Atari owners. My experience in the Atari world has shown me that most Atari owners, and CN readers in particular, are not kids playing games in front of the TV. They are intelligent, well-informed adults, from a wide variety of different professions, with a keen eye for value and a wealth of valuable experience and opinions well worth listening to. So, if you would like to contribute your ideas to this discussion, I certainly encourage you to do so.

Meanwhile, let me offer a few observations on the personal computer market. The one scenario all observers seem to agree on is the inevitable growth in what Atari owners call "power without the price." The high-end, razzle dazzle workstations of today will be the low end machines of tomorrow.

Do you recall when Atari first introduced the 520ST? That was an amazing, even breath-taking machine. The monitors (both color and monochrome) were as good as or better than anything else available on the market. The GEM system provided a friendly, graphical, mouse-oriented interface. The speed of the new computer had owners marveling at the "power" of this new home computer. And best of all, the system was affordable! Why it even cost less than the Atari 800's purchased just a few years earlier!

Since then we have seen the introduction of the 1040ST followed by the Mega ST4. Today, the 520ST is the low end computer in Atari's 16-bit offerings. In a few more years, the Mega ST4 will be the low end computer replaced by the next generation Atari.

But what is the "next" generation? Consider the NeXT PC recently introduced by Steven Jobs, founder of Apple. The monitor resolution on this state-of-the-art computer is good enough to show exactly what their new 400 dpi laser printer will produce. Sound output, voice and music, has the fidelity of a compact disc. A removable, erasable optical disk drive can hold enough information to fill hundreds of books. In fact, the disc supplied with the computer comes not only with Unix, word processing, data bases, and a variety of programming languages, but also a dictionary, thesaurus, book of quotations and the complete works of Shakespeare thrown in as well. All this for a $6,500 price tag.

It's too bad this was not Atari's next machine. After all, do you remember reading about the EST (enhanced ST) in these pages with a monitor resolution twice that of the ST mono monitor? How about that marvelous "AMY" sound chip? And who was it, way back in 1985, that first introduced Grolier's Encyclopedia on a CD-ROM to an amazed world? Wasn't that Atari?

But, at the end of 1985, Jack Tramiel put the CD-ROM on hold while he waited for prices to come down, the AMY chip never got anywhere, and the EST--who knows when that will be released? So, the NeXT computer is not Atari's next computer, but it should have been.

The personal computer industry is dominated by continuous, and rapid technological advance. If any company tries to simply rest on its laurels, the industry will pass it by. To stay alive in the PC industry, you MUST be able to innovate, you must have a strong and on-going research and development program, you must, in fact, continue to provide "power without the price."

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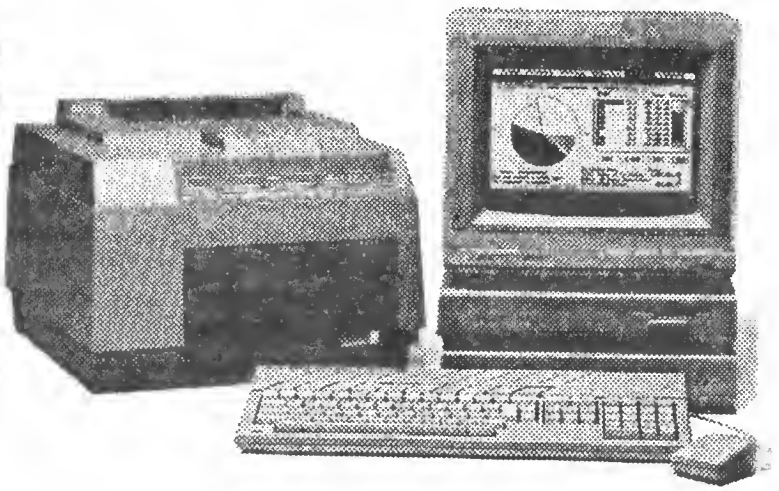

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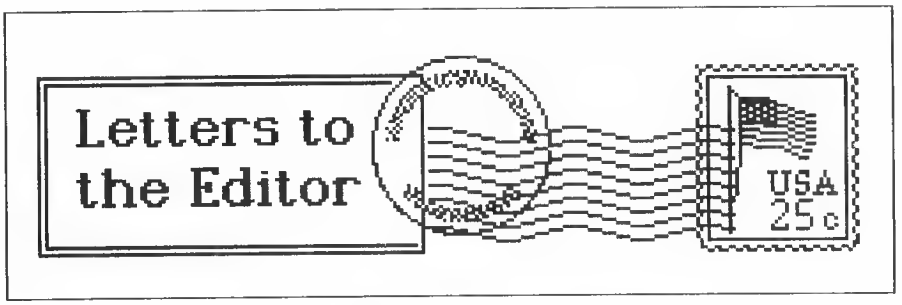

One More Tip: + $1

Dear Frank,

Thank you for the glowing review of my new book, The Atari ST Book of Tips, Instructions, etc., which appeared in the September issue of *Current Notes*. However, there was one thing in the review which, unfortunately, reminded me of the large party my employer gave me for my 45th birthday, at which I was introduced as a "55 year old computer genius." Somehow, the review incorrectly listed the books's price; it actually sells for $16.95. It's available from Atari dealers or can be ordered directly from the publisher by adding $2.00 for UPS or Airmail shipping to anywhere in the US or Canada: Index Legalis Publishing, PO Box 1822–27, Fairfield, IA 52556, (515) 472–2293.

Sincerely,
Ralph C. Turner

[Our error, Mr. Turner. – FS]

Super Superbase

To the Editor:

John Barnes' recent review of *Superbase Personal (SB)* for the ST in the June issue largely misses the point of this powerful and easy–to–use database system, both its real strengths and its serious weakness in the area of report formatting. Barnes, I fear, merely played with the program with an elementary application; it deserves and can handle a much heavier workout.

Barnes also is plain wrong in stating that SB does not have command language support. *Superbase Professional* is out for the ST––I have it. It arrived a couple of weeks before Barnes' review came out, but I haven't had time to dig into it, so these remarks are based exclusively on my use of *Superbase Personal* over the past several months.

The first point to make about *SB* is that it has enormous flexibility in file design and modification. The number of fields per record is unlimited, and you can modify the file structure to your heart's content without disturbing the data. This makes it a breeze to let your file structure evolve over time as you think of new fields to include, lengthen this or that text field, revise your formulas, etc. *SB* will support enormously complex databases with 150 fields per record (which I'm now doing) just as easily as a 12–field record structure.

In *SB's* form view of each record, you can position the fields in any order and screen position you like, and then change them later. The order in which data items are entered into new records is governed by their screen positioning, and thus you can modify the order of data entry merely by dragging the individual field names around on–screen with the mouse.

Sorting your data records is a thing of the past with *SB*, which uses indexing instead. *SB* indexes your files on whichever field or fields you select (including every field, if you want that). The indexing is done automatically whenever you enter or modify a record. For this reason, retrieval of individual records in sorted order, based on any field in the file definition, is as fast as the disk access will allow (instantaneous with a ramdisk). Access can be sequential through the whole file or filtered, as you choose.

The VCR–type icons for controlling record access that Barnes disparages are actually very effective. Barnes is right in suggesting that there should also be function–key equivalents for these icons, but it would be a serious mistake to get rid of them. For the beginner, in particular, they are a superior interface, but I am hardly a beginner and I also find them very effective and quick.

For all these reasons I have found *SB*, despite its limitations, some of which Barnes correctly identifies, to be aneasy, intuitive, and very powerful system for building a complex nonrelational file structure. I have not explored its relational capabilities yet, so I'll leave that aside, except to say that I found the documentation on relational queries to be straightforward, and I expect no problems using *SB's* relational power.

Superbase Personal for the IBM PC was also recently reviewed in the April 26 issue of PC Magazine, and CN readers may be interested in the evaluation given *SB* as compared with a number of other non–programmable relational database programs for the PC. (The following excerpts are reprinted with the permission of PC Magazine.) "Occasionally meriting the superlative, this relatively new product offers easy design, query, and report functions." "Building and using a database is admirably simple in Superbase.... Making global changes, importing ASCII files, simple reporting, and querying can all be executed deftly by the new user." The VCR–like controls are called a "nice touch."

In the end, PC Magazine made *Superbase Personal* one of its two editor's choices in this category of databases, in spite of downgrading it for the fact that it only works in the GEM operating environment. They reported that *Superbase Personal* "outperformed all others on PC Labs benchmark tests...," at a price less than one third the price of their other editor's choice.

What does all this have to do with the Atari version, you ask? It says, among other things, that Precision Software (the British creator of *SB*) knows how to design software that can hack it in the IBM world, that the GEM interface is their working environment on all machines, and in particular that they do elegant and powerful software implementations of data handling routines. One is entitled to be a skeptic and say that the Atari version may be different, but my experience is that the Atari version matches closely all the observations that PC Magazine makes about the PC version.

Now for the bad side. *SB Personal* does have a very serious limitation that Barnes did not mention: it has only the most elementary capabilities for labeling and formatting reports ("queries"). I cannot do as sophisticated a report print-out from *Superbase Personal*, or present as much detail in a report print-out, as I can with my old *Data Perfect* for the 8-bit Atari. That is a big problem, and it is the reason I purchased *Superbase Professional*, which with its programming language is supposed to provide all the control over report formatting that I will need. I'm also told by Progressive Peripherals, the US distributor, that the next upgrade of *SB Personal* will include dramatically enhanced report formatting capabilities.

I should add that Progressive Peripherals' apparent attitude toward the Atari market is the other negative I see inthe *SB* products. In my experience, their technical assistance personnel view questions from Atari users with ... shall we say, lack of interest. In other words, my experience with them was not encouraging, so I think it best to say that the product itself, within the design limitations, is very powerful and attractive, but just don't expect much software support from the US distributor (given *SB's* ease of use, you probably won't need much anyhow).

Barnes' familiarity with *dBASE* gives him a perspective I do not have, so perhaps I should concede to other *dBASE* users that they may want to stick with Barnes' evaluation. After all, why learn a new system if you can buy a *dBASE* clone whose commands are already familiar? But new database users should definitely give *Superbase* a serious look if they don't absolutely have to have *dBASE* compatibility.

Don Tucker
Bethesda, MD

Barnes' reply:

In April, when my review of *SuperBase Personal* was submitted, I could not find *SuperBase Professional* in any store. This is, however, irrelevant because Mr. Tucker has not delved into the language aspect. I hope to get hold of *SuperBase Professional* some day, and plan to do a follow-up review on that product.

After analyzing Mr. Tucker's comments and my own review I am having trouble seeing what point I missed. Mr. Tucker mainly appears to be upset because his favorite piece of software did not get an A. A passing grade at *Current Notes* is, however, equivalent to a summa cum laude elsewhere. His comments on support for the users of the product are interesting. I did not find it necessary to test this feature. Report writers have always been a bane for database users. I rarely use them, preferring to handle this problem by way of a programming language.

Matters like operator interfaces are largely matters of taste. Mr. Tucker and I evidently differ in this area. Different strokes for different folks.

Just Where Is Atari?

Dear Editor,

Item: Yesterday I was standing in Applied Computer Associates and heard someone ask for one of the owners. He was told that the owner was working for another computer brand company in Frederick.
Item: I visit Cal Com in Wheaton about once a month. This was once THE place to go for ST software. Over the last year I have watched the Amiga camel squeeze not only its nose, but its whole body into the tent. *And it is a big camel!*
Item: COMPUTER SHOPPER (which has been far more supportive of the ST than its advertising intake warrants) has started winding down...5 ST articles an issue...then 4...then 3...now 2.
Item: The August issue of FAMILY AND OFFICE COMPUTING (or whatever its name may be this month) is flatly dropping all Atari commentary (this after dropping the ST a while back).
Item: Crown Books no longer handles Atari software.
Item: ST WORLD can no longer be found in this area.

I feel like I am at a wake and all the attendees are quietly drifting away. Things are sad.

Where is the flow of good, new software? Where are the accelerator boards? Where are the cheap hard dirves? Where are the nifty utilities that make my old programs Postscript compatible? Where are the goodies? And just where is Atari?

In August of '86, my new ST could knock the socks off the competition. It just ain't that way

anymore. Could it be time for you (as editor) to consider a monthly column dedicated to helping the disillusioned peacefully emigrate to other (pun intended) computer-lands?

I have read the occasional *Current Notes* Atari-floggings and wondered why they didn't respond with at least a written defense (if they were not going to actually do something about theproblems.) And the answer is becoming clear. They can't.

Rex Harrill
Keedysville, MD

[I work with a Mac II and a PS II daily. I have found, however, that the grass is not always greener. Atari owners need not look to other computerlands--hang on to what you have. CN will never be a Mac, or PC, or Commodore magazine. -JW]

Three Cheers!!!

Dear Joe;

I'm writing to compliment you on your recent excellent coverage of some long awaited advancements in the realm of ST desktop publishing. Three cheers for you, Timeworks, Soft Logik, and Hewlett Packard. We have finaly and indisputably arrived!

I would also like to add a couple of notes and a correction to the review of the Hewlett Packard Deskjet. I am the fortunate owner of a shiney new one with the Epson Emulation cartridge and the chief failing of Jim Wallace's review is that it is not positive enough. (Many thanks also for the tip on Hammermill laser plus paper, it is terrific). This is one marvelous printer.

However, there are a couple of drawbacks. Since there is no impact of a pin or metal character on paper the Deskjet will not make carbon copies or mimeograph (remember mimeographs?) originals. This is little handicap in todays copier world. The other reason that someone may not want to throw out their old impact printer is that the water soluble ink used will run if it gets wet. This makes it somewhat unsuitable for addressing envelopes as they can get wet along their journey (I know these things, I'm a letter carrier).

The good news is that Wallace statement that the Epson emulation will not improve on a real Epsons print quality is true only for graphics. The fonts will print out as they would on an Epson but at 300 dpi. These fonts are the same beautiful ones that the Deskjet prints with in native mode. I know this is amazing, but you can see for yourself. This letter was typed with *Word Writer* and a standard Epson driver, on my Deskjet with the Epson cartridge installed. Graphics are very blocky looking because the graphics blocks are squared off at 300 dpi. They actually look smoother on the nine wire SG-10 I sold when I got the Deskjet because of the pins' overlapping nature.

But believe me, I'm not going back. This baby just has too much else going for it.

Menno Rapson
Decatur, IL.

A WP Fan Forever

Dear Frank,

As you are well aware, we "Atarians" depend on you, Joe Waters, Bob Kelly and other contributing "savants" to keep us "au courant" regarding the latest news and developments in the Atari world. And, as far as I am concerned, you do a fine job of keeping us..."current!" Joe Waters' masthead clearly states that the opinions expressed by individual authors are theirs and not necessarily those of CURRENT NOTES. I both applaud and agree with that policy...yet, when I read comments that might be misconstrued by the readers...I feel obligated to chime in with my two cent's worth.

Such is the case with Bob Kelly's diatribe against *WordPerfect* in May's "Atariscuttlebits." At least, I think it was a diatribe. He takes several shots at *WordPerfect* and then follows each shot with a disclaimer. I have read, and reread Bob Kelly's comments regarding *WordPerfect* and still have yet to come away with a clear message. If his main point is that it is unfortunate that one of the top software leaders launched an expensive and powerful word processing program that was "buggy," then I agree. However, I don't agree that was the main reason that the Atari version didn't sell as well as it perhaps could have.

His initial thrust appears to be opining that *WordPerfect* jumped the gun by introducing its Atari version before ensuring that it was bug-free. Yet, he quickly adds that *WordPerfect* rapidly provided fixes for the bugs. While commenting that the early buggy versions accounted for *WordPerfect's* difficulties in the Atari market, Bob stated that the piracy issue could have been a smoke screen. He said, "REMEMBER, the impact from a pirated program is negative, in terms of cash flow, ONLY IF it substitutes for what otherwise would have been a cash purchase." Now, I have kicked that particular statement around in my mental ram-disk six ways from Saturday, and I'll be darned if I can understand it... At any rate, *WordPerfect* is not a non-profit organization, and the bottom line, with regard to issuing and supporting programs, is a very simple matter of economics. If there are enough buyers in the market to ensure profits, then the line will be continued and improved. If not, then it probably will not. So, perhaps a better question would be, "Are there enough Atari users out

there who would buy the program?"

As a registered owner of *WordPerfect 4.1* for the Atari, I can assure any interested reader that it is probably the strongest word processing program available to Atarians....and only surpassed in features and power by its commitment to support the users. That support function, in my opinion, far outshines whatever initial bugs the program had. I defy anyone to come up with any product support that can even come close to the people in Oram, UT. *WordPerfect* has a TOLL-FREE help line with real, live technicians waiting to help resolve any problems. I have called them several times, and in spite of the "dumbness" of my questions, I have always been treated as if I were a Fortune 500 CEO who had just purchased two thousand copies of *WordPerfect*. In one specific case, I was having trouble printing out documents on my Epson FX-80, and when the regular procedures suggested by the technician didn't work, she went off line for a moment and returned and walked me through resetting the printers' DIP switch positions to make it more compatible with *WordPerfect*. The point here is that less committed technicians could easily have simply referred me to my printer manual and left it at that. (Thanks, Laurie).

I started out using *WordPerfect* for the run-of-the-mill "Aunt Jane" letters and have progressed to a rather complicated mini-data base for the two hundred plus Atari vendors that I (as Atarifest '88 Vendor Representative) have written, inviting them to participate in our Atari fair. I used the data base to create mailing lists and to also serve as a continuous update of vendors responses, table assignments, etc. It also took a couple of calls to Oram to fine tune that effort, and *WordPerfect* couldn't have been more cooperative.

I am convinced that when I eventually turn to writing my Great American Novel (on the Atari, of course), I will have *WordPerfect* right there behind me, helping me along to financial independence and literary greatness. As you can easily see, I am not very objective when it comes to *WordPerfect*. Personally, I hope that enough of us buy it to ensure its continued existence and upgrades...

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ST UPDATE ♦ Frank Sommers

Rumours & Quotes

Tales of Atari being "on the selling block" have been circulating for several months. Suddenly, along with the culmination of "The Silly Season," (read presidential election campaigns, when nobody believes anything any office seeker says), the stories multiplied. The truth of the matter is, as most of us realize, that Atari has been for sale since the moment Jack Tramiel seized power and had the authority to unload it. Obviously, the right amount of Vitamin M (for Money) would have him signing sale papers any given day or night. But no buyer is being sought, and at this stage and until the Federated drain on the financial battery is corrected, nobody will make an offer Mr. Tramiel can't refuse.

Atari may also be seen by him quite logically as a heritage for his sons. A small company that has the potential for manufacturing a lot of material comfort as well as challenge for its future owners.

Not so many weeks ago Jack was drawn into a conversation by a dealer who was urging him, as a person running a computer business, to take a bit more pains with his Atari dealers. Jack brushed off the challenge, reportedly, by saying, "I'm not in the computer business. I'm in the money making business. I'll make and sell any electronic item that will achieve that goal."

What's NeXT?

Mr. Job's new machine is what is next in the forward rushing computer world. The former creator and owner of Apple unveiled his machine, called "The Next Computer System" or just "NeXT," last month, midst a fountain of publicity that caused IBM and other workstation manufacturers to flush with envy. (This, despite IBM's recent remarkably forward-looking announcement about removing numerous job constraints on a quarter of a million employees, and in effect, releasing much of the traditional hold of management over labor and giving their workers significantly more control over their lives and where and how they choose to work.)

Described as "a neat, neat box," designed initially for the academic world, the comment-stirring features of NeXT were an erasable, removable, optical-disk drive that can hold pictures, and sound, plus the contents of a small section of a library; a sound chip with a microphone that can record and playback sound with the fidelity of a compact disk; a 17" high-resolution black-and-white monitor whose screen display precisely reflects the finished product from a 300 dot per inch laser printer (which is optional but of a quality that surpasses the industry standard at 1/3 the price); and a small library of software designed for the needs of the student and the teacher. The software includes the complete works of Shakespeare, with ability to call up and see/hear any lines you select, an *Oxford Book of Quotations*, Unix, Lisp artificial-intelligence software, Mathematica, a program for advanced mathematical calculations, and the usual word processor, data base, dictionary and thesaurus. At its San Francisco unveiling, Jobs ran a 10 minute demo where NeXT did all the talking and the teaching to demonstrate what he meant by "Courseware," i.e. programs teachers create using building block modules rather than straight programming, which are then played back as a "video" lecture. To complete the tantalization he also had NeXT perform in a duet with a real violinist. Available in quantity next summer, students will be able to order it for the fall term for $6,500, $3000 over Job's original estimate; the rest of us can expect to see it list for about $5000 more than students will pay. So, what's next?

Pocket Computers & Atari, England

British Atari magazines are talking about the release early next year of an Atari pocket PC, billed as a housewive's companion, that will have a 256K ROM bubble memory (do we believe it?), instead of a disk drive, with 512K of random access memory; programs to be imported via the RS232 port. It is due in January of this coming year. And a laptop for the Atari (the one that disappeared from Comdex?) will go on sale in February or March. There is also talk of a diskless ST that will function as a game machine only. Contradicting each other are reports (1) that Atari has a repair ratio of 1-2% while the Amiga has a 35% ratio of out of the box failures and (2) reports that young people, despite repair problems, intend to buy the Amiga, 2 to 1, over the Atari. To counter these ratings Atari will be bringing out a machine, touted as "The Amiga Killer," with just as many colors but sharper. Actually it will be the EST (enhanced ST) with the high resolution monitor, both of which will eventually be appearing in the U.S..

Vegas Goes Electronic

The Commercial Dealers Electronic Expo will be starting shortly after you receive this, 14-16 November. There was much talk that ATARI planned to "wow 'em" at COMDEX with a panoply of Atari computer delights. The Abaq was to

be up and humming. A high res monitor, 1260 x 980, was going to be attached to everything that would display graphics, except for the laptop, which would have its own screen. The EST with a high res monitor and a 32–bit 68030 chip in it was going to be the shining new delight, enticing all, along with *UltraScrip,* the software emulation of *PostScript*, a CD ROM player and a bag full of other goodies.

Then pow! The hardware frontispieces have all but vanished from Comdex and the U.S. scene. *UltraScrip* may still make the stage; in early October it was reported to be "four commands" away from being finished and not only ready to show, but also to sell by Xmas. There may also be an Atari 286 PC clone. Word on the electric street is that there are 1000 286 PC's which will be sold in the U.S. by Federated Stores versus dealers. The reason for the vanishing goodies? Periodically, Atari "gets religion" and declares it will show no product before its time, much less talk about it. This lasts for a while and then profit pangs occur and the old addiction for stockware, to boost the value of the 5000 shares a year that the original management team can buy for $1 a share, comes on again. This time it seems like the stockware urge came and went, all before COMDEX.

Jack has been quoted in the past as saying, "Our domestic market is in Europe. The U.S. and Canada are our international markets."

The Weak Reed

People at WordPerfect Corp. were asked about rumours that WP had "stopped supporting the ST." You will remember earlier we had reported that WP had put the Atari laser printer on "limited support status." The rumours are almost true. WP has discontinued all work on upgrades/improvements for the ST WP program. The developers and programmers have been transfered to other projects, like the Amiga and the Mac. Who would have thought the Amiga would have achieved "a higher status" than the ST, at least in the columns of sales reports. Therefore, there will be no WP version 4.2 or 5.0 or 6.0, (actually, the last of these, 6.0 was on the development calendar).

Why? In the words of one knowledgeable WP developer, WP dealt with Atari in good faith, only to find they were bucking their heads against a stonewall, or to put it differently, depending on a weak reed. WordPerfect believed the Atari market was shrinking, not expanding. It is the kind of market at present that WPCorp does not find attractive. The machine base is small and not expanding, certainly in the U.S., and since Europe gets 50% of its non–game software from this country, presumably the market will shrink in Europe also as developers turn away from the ST. Two of the major outlets for increasing that base, dealers and mail order companies, have been reduced or are in the process of being eliminated. As WPCorp says, "It doesn't make sense to develop for a contracting market." But they noted that if Atari became more of a business machine and less of a game device and Atari began to support the U.S. market then WP, which has the personnel, might reverse itself and resume development efforts for the ST.

What is Atari's side of the argument and, in fact, do they have one. First we have to understand that Atari is like an army platoon, pretending it's a battalion. Move one man to another job and all of his projects are cancelled. There just aren't any replacement parts. Remember IBM has more than 200,000 employees, Atari less than 200 in the U.S. So the programmer supporting the WordPerfect project, i.e. the Diablo emulator that was causing most of the problem, is moved to games, where a new U.S. profit center is sprouting up fast, and bang! End of support for WordPerfect. People at Atari state convincingly that actually WPCorp got more support for its product than any other developer. WPCorp just didn't understand how limited Atari support is, for any product. Draw your own conclusions about what this means for major software companies creating products or even translating products for the ST.

So for now, enjoy the most powerful, and for those who need punch, the best word processing program available for the ST. It's on "indefinite hold" at WP Corp; so it won't get any better. But it's still great.

And remember those of you who are Specter 128 fans and have your ST dancing like a Mac can enjoy the latest WP revisions that are out and coming out for the MacIntosh. Similarly, pc–Ditto owners can use WP version 5.0; slow now, but soon to be speedier when Bill Teal issues his speed upgrade or when Kenneth George's accelerator board finally hits the market, which he hopes will be before Xmas. Unfortunately, Atari laser printer owners will have to wait for drivers for both the Mac and the IBM emulations.

Plants and Dealers and Things

In Texas, around Houston, they see Jack Tramiel as "a pretty smart fellow." There is little raging about what he isn't doing to facilitate the pleasure of owners of his computers. Why smart? Well, he hasn't raced up to sign for a plant, touted as "providing 800 plus jobs to the area." Nope. The price offered by the city of Houston just wasn't right. The tax breaks weren't there, or at least as big as they could be. So off he canters to the suburbs. And now

the shopping malls and other sites are engaged in a bidding contest to see which one wins the Tramiel Tag Match.

Thus it will be a "bit longer" before the plant, whereever it will be located, will exist and start production.

Now, while they might think Jack has a head for business, they do shake their own heads at what's happening to dealers versus Federated. First, the understanding that only dealers would sell the big time Mega's, the business machines from Atari, appears to have been violated. Not only will Federated sell the Mega's, but because of their financial tie to Atari they will be able to offer immediate credit terms. Dealers have to scramble to come up with that kind of financing. On the wings of that news come the oily whispers that there will be a "Federated Association of Dealers." Some dealers in Federated territories question whether they are about to be "sanctioned" (an old Mafia term).

$Billions & $Billions

The Atari laptop mystery continues. Will Atari produce one or won't it. There was some evidence that Atari would "show" one at Comdex in November. (See Comdex above.) Several weeks earlier, a spate of laptop machines, ranging in price from $2,000 to $10,000 were introduced by NEC, Toshiba, and Compaq with reports that IBM will soon introduce a successor to its PC Convertible. The $Numbers may be attracting the Tramiels. Estimated sales of laptops for 1988 hit 750,000 with a price tag of over a $Billion. So a market is certainly there. What kind of a machine would Atari have displayed at Comdex? Likely it would have been a 1040 ST with two meg of memory in a laptop tux with a super twist screen, and possibly a 20 meg hard drive. Now it is scheduled for sale in England next year (See above).

Monitor Musing

Last time we said that ISD Canada (see a review of their *DynaCad* program next month) would be introducing the high resolution monitor made by Moniterm in Minneapolis before it appeared in the U.S. Actually ISD is studying several adaptor cards for the monitor that are being made in France and England and hasn't decided yet about distribution of Moniterm products in Canada. But Moniterm, U.S. is now informing dealers that the monitor and card will be available by December for $1995 list.

The Fragaman Moves On

Apparently, a list has been compiled of people who have left Atari in the last year. We were disappointed to hear Neil Harris' name has just joined that list. Always out front, if not always able to be forthcoming about Atari products because of holds, delays and switches in products, Harris was probably Atari's best known and most effective spokesman. We understand he elected to leave, thus passing up possibly lucrative future stock options, to locate in a more congenial professional atmosphere. He has become Manager of Product Marketing at GEnie, a $400 million–a–year company. Reportedly about 60% of GEnie's new accounts jump ship after the first six months. One of his responsibilities is described as acquiring and marketing a basket of wares that will cut back on those numbers. Best of luck, Neil.

Tired of the Null?

Those of you who refuse to leave your "favorites" behind as you move from the world of the 8–bit to the ST know the frustration of the null modem cable. The cable you use to connect the two machines and "transfer" the best of the best to your ST from your 800, 800XL or 130XE. Well, Derek Mihoka, author of the *ST Xformer* (the emulation that lets you run some 8–bit software on your ST) has produced an interface cable and a quick transfer utility that will allow you to move entire disks from one medium to the other and then with *ST Xformer* run them to your heart's content. The cost is $30, if you're a registered owner, and this includes an update for *ST Xformer*. Add $10 if you don't own the emulator, and you'll receive all three. [Darek Mihocka, 310–D Bluevale ST. N. Waterloo, Ontario N2J 4G3, Canada; (519)747–0386.] Money orders, no U.S. checks, please; they require some time to cash in Canada.

Power & Price

Some of us have been observing that the power of the computer is on an ever upward curve, while the price will probably remain about the same. Others of us may have thought that the ST and the Mega's were approaching a price range where all that was left of the Tramiel slogan, "P without the P," was the power. Well, all of us apparently were wrong. Compaq's new 386/25 (yes, that's right a 80386 chip running at 25 megahertz) has power and storage that makes the Mega ST4 look like a wristwatch calculator! How about 16 meg of operating memory (RAM)? And how about a hard disk that doesn't just store 40 or 80 megabytes, but instead, zeroes away up to 1.2 gigabytes? But how about, fully equipped, a sticker tag of $52,000. Maybe the Tramiel slogan is still valid. Another example might be shareware. The ST average cost is $10. A new version of IBM's shareware program, *pc–Write*, is out. Suggested shareware price––$89.

The Gambler

Like locusts, backgammon is a cyclical phenomenon that infests the psyche every so many years and then recedes until the next surge. Champions become press figures and world champions become national heroes because of their lightning computational skills and steely nerves. We may be moving into a new infestation of this game for high rollers as well as just married couples. The best version available for the ST is *Club Backgammon* by California Dreams and distributed by Logical Design Works [780 Montague Expwy., Suite 403, San Jose CA; (408) 435–1445]. With excellent graphics and a musical opening as the pieces flash across the board loading into start–up position, the game at the expert level is a serious challenge for the average to strong player. Although the same doesn't hold true for the expert, the game is well crafted, with the standard options, and, if you're a "player," equally as addicting as your favorite arcade or adventure game. $1 a point with an option to double the bet on the first roll, anyone?

Hats Off Award

They're off! in the Clip Art Sweepstakes. Flashing down the screen come the mainstays of "fast art" for your ST or Mega. Timeworks has just entered the race with its three disks (*Symbols & Slogans, Education Graphics,* and *People & Places*) with over a hundred different figures and clips, as a supplement to its *Publisher ST* desktop program. Though numerous and varied, but with heavy lines and lacking resoution, the Timeworks offering packs in along side the eight disks of faster art with over 150 screens in CN's PD library, a basic collection of reasonably good stuff. Bobbing right along with them, trying to break out of the pack is Migraph's *Scanart,* two full disks of reasonably well etched figures. But out front by several lengths is *Drawart*, also by Migraph. The reason is simply that the shapes and figures are the sharpest and crispest with a professional look no matter how big or small you choose to make them. They have been drawn by expert hand using *EasyDraw,* rather than scanned and put on disk. An interesting feature as they load into *Publisher ST,* is the reverse strip tease. A house appears first as wooden skeleton, flick and it has walls, and then the rooms changes quickly to an outside view of the structure. All almost too fast to follow. Using the blowup feature in *EasyDraw* you can pause each screen and marvel at the insides of a camera. Then with a click you can turn it into the whole thing. Would that there were more of it. Winning stuff. Hats Off!, Migraph!!

A New Software House

Specialized Software, Inc. [3570 Shannon road, Cleveland Heights, OH 44118; (718) 252–1481] has opened its doors and is now seeking unique, quality software to distribute. Read about one of its products elsewhere in this issue, the Hebrew language word processor. A new firm, Specialized Software would seem to offer creative new programmers a chance to swim toward the top early on. Those of you who believe you have unique products may wish to contact them.

Look Out Pentagon!

Secretary Carlucci may have thought he handled last month's sit in at the Pentagon deftly. A prominent Atari dealer in California believes Carlucci hasn't seen anything until he faces "a band of angry computer authoresses".

The dealer sold three separate Mega ST's with word processing software to three separate would be authors. He states he also gave the individuals about nine hours of free consultation over the course of a week or so. As we all know, some computers just don't like some people, be they authors or accountants. Suddenly, the dealer began receiving terse calls from Atari Corp, which was complaining that they were receiving a spate of calls from individuals who had bought their computers from you know whom. One of them was a lawyer, and apparently the three were now organized and ready to do battle. Would the dealer please "take care of the matter." Interesting to have Atari issuing quidelines for support to Atari owners. The end of it is not in sight, apparently, and the dealer expects he will open his doors one morning only to find a brigade of picketers three marching in front of his store. Do little groups like this really fulminate into full–sized marches on Washington?

Electronic Ethics?

Electronic Arts anticipated the President of Yale University's exhortation to his graduating Class of '88. President Benno Schmidt urged them to strive not for the bottom line but instead to go forth in their careers with the goal of rebuilding a nation of values. Simultaneously, A *Question of Scruples*, distributed by EA but created by Virgin Games, invaded the market place. "Face up to provocative moral dilemmas" was the billing. The fanfare goes on to talk about "truthfulness and deception, bluff and counterbluff..." Some of us may have trouble grasping the idea that integrity is a game, or that you can "bluff" about having it. Keep it up, Benno. Hopefully, all the members of the Class of '46 will hear you also.

To GOE Or Not To GOE

I would like to begin this month's column with a letter from John E. Berthold of Elk Mound, Wisconsin.

"Question: What do the Old Testament and Atari have in common?

"Answer: The Promised Land. You wait for 2000 years and when you finally get it, it's not all it was supposed to be.

"I first read about Merrill Ward's Graphic Operating Environment (G.O.E.) in *Current Notes* and was excited to know that the 8-bit Atari was finally going to have its own desk-top operating system, complete with word processor, paint program, etc. I was even happier to learn that this was all going to be in one super cartridge. I like cartridges and can't understand why they are not used more, especially for larger programs. When you turn on your computer, they are right there, ready to run. There is no waiting through that incessant beeping and clicking while the program loads from a disk. I sent for the demo disk and took it to my user group meeting where we all agreed that it looked great.

"Now in your September issue I find that Merrill Ward dropped it and the word processor and paint program will be on disk. I might as well stick with First XLEnt Word Processor and AtariArtist. Total Control Systems just lost a sale."

To reply to Mr. Berthold and all other users interested in the GOE product, I offer the following information supplied me by David R. Sullivan, GOE's author and president of TCS.

TCS was present in September at the Southern California Atari Computer Fair showing GOE as well as other TCS products for the 8-bits and the STs. GOE, however, was not available for purchase at that time. Since the program is on cartridge, that delayed development. Also, ICD, Inc. (the cartridge supplier) could not make shipment until October.

According to TCS promotional information, GOE will support the following: windows (resizable, slidable, and movable); drop down/pop up menus; desk accessories (control panel, calculator, and notepad); control by either mouse, joystick, or keyboard; various font styles and sizes; Atari Help/console keys; and the ability to load external programs. The desktop (which ties up only 8K) will support redefinable disks/files; disk naming; comment storage for each disk and file; time/date stamping; directory sorting by name and number; SpartaDOS II; and Atari DOS.

Two companion programs (slated to be on disk) are *goPaint* and *goWrite*. The former will feature a NEOchrome-like menu system with the ability to paint in 4-color or 1 (.5) color modes (160x200 and 320x200). It will allow painting/drawing of a full page of graphics. This makes it possible for the user to edit a picture that, when printed, will fill an entire page.

goWrite will include many traditional word processing features (e.g. cut-and-paste) as well as others, such as clip art, and multiple fonts and font sizes. It also will allow cut-outs to be used from *goPaint*.

In October, the cartridge was selling for $50.00 direct from TCS. Included in the manual was a coupon for the paint and word processing programs, which were not completed at that time. For a nominal fee, upon the return of the owner's registration form and the coupon, the user would receive both disk-based programs.

Whether or not this introductory offer would continue beyond October 31, and whether or not any of these products actually were available for purchase was unknown to CN before it went to press with this issue. By the end of September all that this writer had in his possession was a demo version of the operating environment and desktop. While some of the features (e.g., calculator) were operative and impressive, others were absent (e.g., notepad) or non-functional (execute DOS).

CN has been following (with increasing frustration) the various twists and turns (and there have been many) GOE has gone through since it first was announced by Merrill Ward earlier this year. Hopefully, by the time you read this, GOE will be available, and--if it is as good as it has been touted to be--selling quite well. We shall see.

[Total Control Systems, 4156 Tolowa Street, San Diego, C 92117, (619) 270-0111].

Diamond OS Completed

A few days before going to press, I received a copy of *Diamond OS* from Shelly Merrill, president of Merrill Ward and the newly formed USA Media. Developed by Reeve Software, *Diamond OS* is a graphics operating environment for Atari 8-bit computers. Fondly labelled "ST, Jr." by Mr. Merrill, *Diamond OS* would appear to do for the 8-bits what the GEM environment does for the STs.

Currently residing on disk, this 64K program is, in effect, a new standard XE user system. Virtually every feature found on the DUP.SYS file on an Atari DOS 2.0

disk can be accessed through *Diamond OS*. Rather than typing commands, however (e.g, "L" for binary load), all the *Diamond OS* user need do is use his joystick, mouse, keyboard keys, trackball, or touch tablet to move a graphics arrow over to the command desired and click or double click the input device in order to activate it.

Like *GEM*, *Diamond OS* contains drop-down menus, windows, dialogue boxes, and icons. The file icons and the trash can icon can be dragged to any location on the desktop that the user desires. Files may be dragged to the trash can in order to be deleted. Windows may use the entire screen area, be dragged to new locations, or be increased or decreased in size.

Other features currently not available on the disk version will appear on the 48K cartridge version which, according to Mr. Merrill, will be on the market by the time you read this. Among these improvements will be the following:

- ✓ Better switching to Atari Basic and back to the desktop;
- ✓ Drag/Select multiple files;
- ✓ Print/Show of non-executable files;
- ✓ Folders and time/date stamping;
- ✓ Multiple windows (up to four);
- ✓ Window slider;
- ✓ Drag of disk to disk for total disk copy;
- ✓ TTP (parameter) files;
- ✓ More graphics in the dialogue boxes and highlighting of the default option;
- ✓ Inclusion of *Diamond Write* (a full-featured, 40-column word processor) and *Diamond Paint* (a sophisticated paint program);
- ✓ Desktop exit options to each of these programs.

Diamond OS may be purchased for $29.95 plus $1.50 shipping from USA Media, 7810 Malcolm Rd., Clinton, MD 20735. Anyone who purchased a *GOE* demo from Merrill Ward may receive *Diamond OS* for $24.95 plus shipping (upon return of the demo disk). Also, there is a two-for-one offer ($59.95 or $54.95 for *Diamond OS, Diamond Write* and *Diamond Paint).* Call 301-868-5494 or write USA Media for further information on these specials.

Other Reeve Software products for *Diamond OS* currently completed or near completion are *Diamond Publish*, a desktop publishing system and the *Diamond Programmer's Kit*. Merrill Ward's *Celebrity Cookbook* and Reeve's *News Station* also are available in the ST, Jr. format. In addition, available from USA Media is a two-button mouse which, for a limited time, is being sold for $39.95 plus $2.50 shipping.

GOE Versus Diamond OS

Although the Diamond product I received appeared to be ready for market, while GOE still was in demo form, there appeared to be significant similarities and differences between the two. In future issues, *Current Notes* will provide in-depth reviews and up-to-date information on each of these systems and their by-products.

Atari Reawakens

Recently this writer has begun receiving press releases from Smith Marketing Communications, Inc., the public relations firm handling Atari's game systems. This represents the first written communication from Atari sent to this column during 1988. Perhaps things are beginning to look up after all.

A significant piece of news is that Larry Siegel has been appointed vice president of video game software development, with total responsibility for game development on Atari's 2600, 7800 and XE game systems and ST computers. The appointment follows an earlier announcement that Nolan Bushnell of Axlon and Gary Kitchen of Imagineering are now developing video games for Atari.

Bushnell, who founded Atari in 1972 and sold it four years later, and his staff will be developing games for the 2600 and 7800 machines. The first of these is scheduled for release in early 1989.

Kitchen's company has agreed to develop ten games over the next year. The projects include original games for all three Atari video game systems, as well as adaptations of popular arcade games.

Atari's expanded game development team is part of the company's campaign to regain top position in the rejuvenated video game industry. Atari is scheduled to release 45 new game titles within the next nine months, and hopes to double its video game sales for the third consecutive year.

This should be considered good news for 8-bit owners whose machines have been starving for new titles for some time now. Also, if new game cartridge titles contribute to additional sales of XE systems, then perhaps many of those new owners will purchase disk drives. If that occurred, then more disk-based software of all types would appear in order to satisfy the needs of those new owners.

It may be that Atari is a year-too-late in hanging tough against its major competitors--Nintendo and Sega. After a relatively fruitless 1988, Atari may have fallen too far behind already. Producing newer, better looking titles (no more 1982 re-releases, please), and bundling inexpensive drives with their XE machine could go a long way toward improving Atari's future.

DOS XE 1.00 Arrives

Another long-expected program arrived by mail this week--Atari's new DOS (DOS XE). Included on the disk are three major menus: File Access Menu, Machine Language Access Menu, and System Function Menu.

The first contains such features as Files Listing, Protect Files, Unprotect Files, Erase Files, Rename Files, View a File, Working Directory, New Directory, Delete Directory, Copy Files, Append to a File, and Initialize Disk.

Included in the second are the following: Files Listing, Working Directory, Run a Binary File, Load a Binary File (Do Not Run), Save Memory to a Binary File, Append Memory to a Binary File, Display Memory, Change Memory, and Go to a Machine Language Program.

The Systems Function Menu allows for Files Listing, Working Directory, Run a Batch File, Set Current Date, Initialize Disk, Create DOS XE.SYS File, Duplicate a Disk, and Allow DOS 2.X Access.

Atari has promised documentation in the near future. Hopefully, shortly after that arrives, a review of DOS XE 1.00 will appear in CN.

THE EXPANDER

RAMDISKS for your XL/XE

by John Pilge

A custom operating system designed for the Atari XL/XE computers with 256k or 512k memory, The Expander allows you to section memory as several single or double density RAMdisks. The RAMdisk is set up as drive two or drive one. So far, it has fooled every DOS I have tried. According to the instructions, you can also boot from the RAMdisk.

Synergy Concepts, which makes The Expander, states that memory expansion made by Newell Industries does not work fully with The Expander. My memory expansion is by Newell. Expander works with all my programs in BASIC. It is unable to run a binary file. But I have no problems with text files or anything in BASIC. Of course, Expander cannot run copy-protected software that is copied to the RAMdisk.

Expander is a **chip** that replaces the Atari OS. Atari 800XL chips are socketed and it is easy to exchange the Atari OS with the Expander OS. The Atari XE computers, however, have chips that are soldered. It is not easy to insert Expander in an Atari XE unless you are handy at desoldering.

Expander includes commands to force a coldstart, break out of a program (useful in using RAMdisks with commercial software such as word processors), and one-button save and load commands. Expander also increases the keyboard response rate so the cursor moves faster.

In tests I performed, Expander worked successfully with all BASIC languages for Atari. It is the perfect OS for *Turbo BASIC*. Be warned, however, that ANY software by Electronic Arts will not function with ANY custom OS including this one. On the other hand, the Expander does act as a translator for older software that does not work with the Atari XL/XE operating system (*Serpentine*, *Protector II*, etc.).

Expander has only a few drawbacks. If a commercial program uses function keys, you may not be able to jump out of the program to use some of the Expander commands.

Newell Systems (3340 Nottingham Ln. Plano, TX) makes a device called the Switchboard that allows you to have up to three operating systems. You select them using a switch that you put on the outside of your Atari.

Users with a memory-expanded Atari XL/XE will find Expander handy for programming, ideal for making use of your extra memory, and great for saving your disk drive motors.

[Synergy Concepts, Box 421370, Sacramento, CA 95841. Phone:(916) 922-4119. Price is $49.95.]

NOVATARI XL/XE PD LIBRARY

Demo Disks
1: Miscellaneous
2: Movie Maker Clips
3: Heavy Metal Art
4: Miscellaneous
5: Desktop DOS + Demos
6: VizPics
7: Mandelbrot factal graphics
8: Hitchhiker's Guide to the Galaxy
9: Wizard of OZ
10: Adventurers Companion

Educational Programs
1: Mathematics
2: Primary Language
3: Teachers' Toolbox
4: Word Builder 1.0
5: Animated stories
6: Geography
7: Bio+Chem with touch typing
8: Basic Math
9: Higher Math and Language
10: The Cell
11: Spelling Bee
12: Math Game
13: WORD GAMES

Games
1: Text Adventures I
2: Gambling
3: Simulations
4: Mazes
5: Parlour Games
6: Graphics
7: Action! Games
8: Arcade Look-A-Likes
9: Text Adventures II
10: Text Adventures III
11: Surf's Up
12: Ski King
13: 20 BASIC Games
14: Super Quiz A & B
15: Two Graphic Adventure Games
16: Space Lords
17: Pinball Games
18: Machine Language Games
19: Dandy Dungeon
20: Holdem Poker
21: Americas Cup
22: Boulder Dash Const. Set
23: Wheel of Fortune & Backgammon

Language Disks
1: Fig-Forth
2: ACTION! source codes (cf. GAMES 7)
3: ACTION! Graphic Demos
4: ACTION! Utility Programs
5: ACTION! Modules #1
6: ACTION! Modules #2
7: BASIC XL-REF Base
8: ACTION! Modules #3
9: Kermit telecom
10: Turbo Basic
11: Pascal Sampler
12: Searcher XL Turbo
13: Turbo Basic for 400/800
14: C Language
15: Turbo Basic Documentation

Music
1: TV/MOVIE Themes
2: ROCK Songs
3: JAZZ Songs
4: BASIC music w/animation
5: Ams Player:12 Rock Songs
6: Ams Player:14 Movie/Video
7: Ams Player:16 Oldies
8: Ams Player:18 Classics
9: Ram130 AMS Beetles' Songs
10: Music Composer Songs
11: Pokey Player
12: Music Major

Utilities
1: MISC introduction
2: Printers
3: DOS 2.5
4: Directory & Label Printer
5: Graphics Trilogy
6: Copymate XE
7: SCOPY sector copier
8: Translator Disk
9: 256K Upgrade
10: Daisy-Dot NLQ
11: Dos 2.6
12: Machdos 2.1
13: Print Shop Editor
14: Easy Find
15: Print Shop Icons
16: Textpro 1.1
17: Print Shop Icons
18: Touch Edit
19: DOS 4.0
20: Graphics
21: 130XE upgrades + Utilities
22: HI-RES 130 (graphics)
23: Rainbow DOS
24: Font Master
25: 3-D CAD
26: Adelaide Symbolic Dis-assembler
27: DB's & Spreadsheet
28: Graphic Utilities & Pics
29: String Magic
30: Print Shop Icons
31: Hacker's Toolkit
32: Weekly Scheduler
33: Textpro 2.5r (telecom)
34: Print Shop Utility
35: Monitor/Debugger
36: Diet & Nutrition
37: General Ledger
38: Super Copiers
39: AtariWriter Printer Drivers
40: Signmaker
41: Billboard Maker
42: Daisy Dot II
43: Graphics Art Department

Telecommunications
1: 850 Interface
2: 835/1030 Modem
3: MPP Modem
4: Amodem 7.2
*5: Chameleon Terminal Emulator *Note: this is a two disk set. Order 5A and 5B.
6: 1030&850 Express (3.0 & 2.1)
7: Data Comm
8: AMIS XM10 BBS program
9: Amodem 7.4 + Rverter
10: FOREM XE BBS

The price for mail orders is $3 per disk plus $1 for postage and handling for every 3 disks. Send checks, payable to NOVATARI, to Jeff King, 10033 Clearfield Ave, Vienna, VA 22180.

Any user group librarians who are willing to trade library disks write or call Roy Brooks, 4020 Travis Parkway, Annadale, VA. 22003, phone (703) 750-0146. We trade with groups all over the world.

Who speaks for America .....

Many readers probably operate under various illusions when it comes to understanding aspects of life in the Nation's Capital. One illusion in particular is that almost everyone in Washington, D.C., works for the Federal Government. The fact is white collar jobs in the private sector far outnumber those in the public sector. Why? A continually increasing segment of the job market in Washington, D.C., metropolitan area is associated with the growth of high technology industries, lobbying or special interest firms, and trade associations representing the broad interest of a specific industry. The latter two categories are dissimilar in many respects but similar in one area--both directly depend upon the Federal Government for their existence. Examples of such organizations are the American Homebuilders Association, American Bankers Association, and oh ... the American Electronics Association (AEA) which represents the interest of many computer manufacturers.

Since the signing in September 1986 of a U.S. – Japan trade agreement, the supply of Dynamic Random Access Memory (DRAM) chips has been limited with the reason for this shortage the focus of considerable controversy. From the viewpoint of the AEA, the trade accord is the primary cause of the shortage of DRAM chips and the consequent run-up in domestic prices. Simply put, the AEA believes the trade agreement to be a new and restrictive law hamstringing a creative segment of American industry.

On the other hand, U.S. producers of DRAM chips regard the AEA view as a less than accurate portrait. U.S. chip producers believe the trade agreement was warranted since the Japanese sold chips below cost (dumping) for many years, driving U.S. firms out of business. Producers frequently remind critics they did not lobby for new laws to be enacted. Rather, they sought the enforcement of existing laws which ultimately led to the 1986 trade accord.

The fact is that only two U.S. firms presently produce 256K chips--Micron and Texas Instruments. Other U.S. firms such as Advance Micro Devices and Motorola supposedly will soon begin production. Regardless of the incremental increase in the production capacity, 256K and 1 megabyte chip prices are expected to remain high for the foreseeable future.

Fed-up with the situation (the high priced DRAM's), Atari, as well as other computer/electronic firms, decided to lobby Congress through the AEA. Despite what you may have heard, the ultimate intent of this initiative is to rescind the 1986 trade agreement and the perceived restraints on trade. Along with Atari, Tektronex, and Apple Computer are the most vocal in supporting this initiative. Jack Tramiel recently stated before a congressional committee on the competitiveness of U.S. industry:

"To be a military power is very old-fashioned. How we succeed in the 1990's is to be an industrial power."

Tramiel also urged that the Department of Defense allow defense contractors with production capacity to produce DRAMS for the retail market plus the creation of a Cabinet-level post to promote U.S. competitiveness and exports.

What's going on! Is Jack Tramiel running for public office? Does he have a social conscience (concern for national welfare and security)? Incidentally, does Jack realize the Department of Commerce (DOC) exists to further U.S. business interests both here and abroad as well as promote the productivity of U.S. industry? (I make no claims regarding DOC's effectiveness in carrying out this mission.)

Before discussing this subject further, two statements of general purpose need to be made. First, it is important to remember almost all participants in the United States at senior policy levels, regardless of political party, have a commitment to free trade. It is a fundamental part of our ideology. On the other hand, whether we live up to the principles in all cases is another matter. Equally important, yet often ignored, is whether the "other guy" plays the game by the rules. Second, I am not writing an article on how to deal with the external trade deficit. I am interested here only with Atari and the micro-chip shortage.

The first question that comes to mind is what exactly did the 1986 U.S.-Japan semiconductor trade accord stipulate. The major points were:

- ✓ The accord prevents the Japanese manufacturers from dumping (selling below cost) in the U.S.

  Comment: It does NOT provide for a quantitative limit (quota) on the importation of Japanese manufactured chips.

- ✓ The Japanese are prohibited from dumping in third countries. **Comment:** The accord does NOT protect the U.S. market from new production capacity in third countries and eventual shipment to the U.S. market.
- ✓ Opens foreign/Japanese markets to U.S. production. **Comment:** The Japanese are, in fact, complying with this provision by buying chips in the U.S. and shipping them back to Japan. Of course, this restricts supply and drives up domestic microprocessor chip prices.
- ✓ Equal access by U.S. firms to Japanese Government sponsored R&D (no insider arrangements).
- ✓ Japanese semiconductor firms were prohibited from adopting policies which result in inordinate increases in production. **Comment**: This provision was designed to prevent the Japanese from "flooding–the–market" in order to drive out competition.
- ✓ Cases brought before the Federal Trade Commission by U.S. firms regarding dumping were suspended.
- ✓ Other countries were encouraged to comply with the general provisions of the accord.
- ✓ U.S.–Japan semiconductor accord terminates in March 1991.

It is worth noting that at the same time the semiconductor accord was signed by President Reagan, protectionist legislation passed by Congress benefiting the clothing and apparel industry was vetoed.

If Atari finds chips manufactured or imported into the U.S. too expensive, why not buy chips at lower prices in other countries where no trade agreement with Japan exists? Once in possession of the chips, ship them to Taiwan and plug them into ST computers prior to shipment to the U.S. and/or Europe. The answer most frequently offered is that 256K Japanese chip production capacity is being converted to one megabit chips. Hogwash! This does not answer the question. A more likely reason for one price world wide involves Japans' use of monopoly power. With prices high all over, what good would rescinding the U.S.–Japan trade agreement be?

For the moment, let's consider two possible scenarios that appear most often in the press:

Scenario one: Japanese chip producers drop prices and expand production capacity. Domestic U.S. production capacity ceases to exist after a few years as they cannot compete. Japanese firms maintain low prices even in the absence of competition. This scenario is hard to swallow. Why would Japanese producers expand investment when profit margins have been significantly narrowed? For that matter, why would they drop prices when they are the sole major suppliers capable of maximizing profit?

Scenario two: Japanese chip manufacturers lower prices, the last few U.S. chip manufacturers go out of business. Up to this point, no different from Scenario one. However, once the U.S. manufacturers go out of business the Japanese raise prices to extract monopoly (cartel) profits. Sound implausible? Let's review some recent history.

U.S. energy policy today is rooted in the fundamental premises that a strong domestic industry is vital to our economic and national security interest. Not so in the past, recall when OPEC held the upper hand, oil prices rose dramatically and huge wind–fall profits were earned by the cartel. This continued until the U.S. and its allies reduced the growth rate in energy consumption through conservation, market pricing policies, and expanded development of domestic energy sources. However, the cost in terms of lost GNP and human suffering from this lesson of cartel power may never be recouped. Unfortunately, memory is a fickle thing and the suffering of the 1970's grows more distant. How is substituting a cartel arrangement among Japanese chip manufacturers different from OPEC? Do you think the Japanese would try to drive the U.S. firms out of the market? If the Japanese became sole suppliers, are concerns for national security warranted?

In conclusion, there is no doubt the immediate visible effect of the 1986 trade accord upon both the U.S. electronics industry and consumer has been a dramatic rise in prices. However, for the long–run, the continued existence of U.S. production capacity may well prevent Japanese firms from continuing to extract excessive profits and exerting monopoly power. Ironically, this will benefit most the very U.S. computer/electronics firms that today are arguing for increased Japanese imports.

As for the Atari Corporation specifically, their actions suggest a desire to avoid a long–term contract arrangement with a domestic chip manufacturer to stabilize input/chip prices. Atari appears to favor buying in the spot market. Given the nature of a spot market, cyclical movements in prices are inevitable. In a market where prices are volatile, firms operate with considerable risk. When chip prices are low, Atari will be happy regardless of the consequences to others. When chip or other input prices are high they will be unhappy and at greater risk. Prices are now high. How is this lobbying effort by the "new, creative industries" different from the old–line industries when market conditions are unfavorable. What policy do you think is in the national interest? I ask.... who speaks for all America!

THE ST/MAC CONNECTION ♦ Jeff Greenblatt

With all the effort that went in to preparing for (and recuperating from) running the Mac room at the WAACE Atarifest in early October, I did not have time to prepare my regular column for this month. However, I did put together four new disks for the CN Magic Sac Library. Descriptions are given below.

I might also mention that we are in the process of testing this library against the new Spectre cartridge. Many things work fine, but there are problems with some disks, particularly the adventure games. CN Disks M23, M24, M31, M36, and M41 DO NOT work with the current version of Spectre. They do work with 128K ROM Macs, so perhaps they will be fine with a future upgrade of Spectre.

On the other hand, with the introduction of Spectre, a whole new world of Mac PD programs will be opening up to us. Look for introductions in the near future of Spectre specfic PD disks.

Meanwhile, here are the new disks for this month:

M62: Demo Disk #4. Contains a limited feature versieon of Math Blaster (an educational game) and Blob Manager Demo (contains 15 unique puzzles demonstrating the power of Blob Manager.

M63D: Mountain of Mayhem. A super graphics/text adventure game.

M64: Fonts #10. Contains York 9-72, York Text.Intro, York Doc.McWrite, Paint 18, Miscpix 24, Icon 12, Cupertino 24, Arabic 24, Fallingwater 24, Schematic 24, Moscow 12, and Isengard 18.

M65D: Deep Angst II. The sequel to the first graphics/text adventure only this version is much larger. Over 100 locations to visit.

Now here is the rest of the library, listed by category of disks.

Desk Accessories

M8: DESK ACCESSORIES NO. 1. 3DTTT Game, Art Thief, Ascii, Bagels Game, Big Ben, Calculator, CopyFile, DA Tester 1.5, Delete File, Desk Acc. Tester, DeskZap 1.2, Eject&Reset, Extras, File Hacker DA, File Tools, Font Grapper+, Font Grapper3, Hex Calculator, HP 12c, MemScan, MemWindow, MerriMac BlackJack, miniWriter, MockTerminal, MockWrite, Moire, MW Count, Other 3.0, Puzzle, Reader, Rubik's Cube, Sampler, Scrapbook, Scientific Calculator, SetFile 3.3, SkipFinder, TheBox, Tiler 1.5, Trails, Transfer, TrapList, Utils, Word Count, Zoom Idle.

M18: DESK ACCESSORIES NO. 2. About Popup.txt, Alarm clock, Art Grapper+, Calculator+, Choose Scrapbook+, DA File, DA Tester 1.5, Disk Labeler, DiskInfo 1.45 + SICNs, Explorer, Gone Fishin', Hex Calc, Label Maker, MemWindow, MiniWRITER 1.34, Multi-Scrapbook, MW 4.5 Counter.DA, Popup 1.0, ProCount, ReadiPrinter, Ruler, SFstartup 1.0, Skipfinder 6.1, Sleep, Stars 1.6, Stars II, Sysfonts, TeaTime, Timer.

M46: DESK ACCESSORIES NO. 3. 35 DAs: 3D Tic-Tac-Toe, A-Bus ID Poker, Abacus, Calendar, CheapPaint, Collapse, Con-Code, Crabs2, DAFile, DAFont, Disp.Msg, Double Apple, Executive Decision, Fat-Mouse, FixPic2.0, Flow, Fun House, Func Keys, Font, Idle, KeyMouse, KnockOut, Multi-Scrap, MW to Text, New MiniDos, Orig Clock, PaintDA, Poker, ProCount, Ruler, Tiler1.5, Timelogger2.11, Utilities, Wrap, WXModem, Sample It.

Utility Disks

M2: TELECOM DISK NO. 1. BinHex 5.0, Free Term 1.8, FreeTerm.Doc, Kermit, PackIt III (V1.3), StuffIt 1.0, TermWorks 1.3.

M3: UTILITIES NO. 1. DES, Font Doubler, MacDump, Mini Finder, PackIt III (V1.3), Reverse Screen 1.0b1, RMover, Scan, Set File. SLICER. Version Reader 1.1, Write Stream.

M5: DISK LIBRARIAN. Disk Librarian V1.82A. Disk Librarian Doc, Short Doc. Contains listing of CN MAGIC LIBRARY.

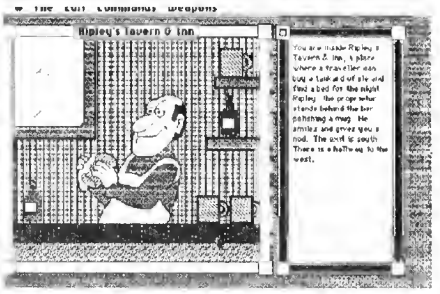
M9: UTILITIES NO. 2. Bind Icons, Change Appl. Font, Convert Desk Acc., Desk Accessory Mover, File Hacker, FontDoubler, Index, MakeScreen, MicroFinder, PurgeIcons, RamAStart 1.3, REdit, ResEd, SelectPaint, Show Version, User Interface Demo.

M11: PRINT UTILITIES. Coventry-12, Disk Labeler, Fast Eddie, Font Mover, Ink, MacWrite 4.5 to Text, miniWriter, MockWrite, Pica-10,ReadMacWrite, Walla Walla-9.

M27: UTILITIES NO. 3. Browse/Snazam!, Clocks: analog & digital, Edit, FEdit 3.0, launch, lazymenu, Magic Beep 1.0, Menu Editor, microFinder, Quick Dir, Quick Print, RamStart2.0+, Road Atlas, ShrinkToFit, SicnEdit, SortMenu, SortMenu Code, SuperFinder4.0, TabsOut, Unpit, WayStation.

M28: RED RYDER 7.0. Red Ryder 7.0, Red's 7.0 Stuff, RR7.0 Macros, RR Docs.

M43: UTILITIES NO. 4. DiskDup+, MacSnoop 1.03, RamDisk+ 1.4, ResTools 2.01, Oasis 2.01 (HFS), Font Librarian (HFS), Switch.



M63D---Mountain of Mayhem

Games

M4: GAMES NO. 1. Backgammon, Bash Big Blue, Curves, MacLuff, MacYahtezee, Maze 3D, Meltdown, Missile Command, Munch, PepsiCas,Smile, Snow, Solitaire, Space Bubbles, Vax Runner II.

M6: GAMES NO. 2. Ashes, Black Box, Destroyer, HexPuzzle, Killer Kalah, MacPoly Demo, Office Attack, Point Symmetry, Snake, Solitaire, Trophy List, Wall Game, Wheel.

M7: GAMES NO. 3. Ashes, Break the Bricks, Deep Ennui, Go, Mac Gunner, MacBugs, MacCommand, MacYahtzee, Wiz Fire.

M15: GAMES NO. 4. Alice, Amps 3(B2), Bricks, Canfield2, Iago, Lets Get Tanked!, MacHeads, Nim, Space Attack, Third Dim.

M20: GAMES NO. 5. Chase'Em, Crystal Raider, Daleks, Golf MacWay, Kill File, Kill, King, King.MacWrite, On-The-Contrary, StuntCopter1.2.

M21: GAMES NO. 6. Guess, Hacker's Contest, Hot Air Balloon, Match, Ramm1.0, Third Dim., Trick-Track, Utaan Attack, Zero Gravity.

M25: GAMES NO. 7. Billiards, Cross Master Demo, Flash Cards, Hangman-9.0, MacLuff, Master Guess, Safari 1.0, Venn.

M30: GAMES NO. 8. Bowl-A-Rama, Mac-Trek 1.1, Mystery Box 1.0, Shots, Star Trek Trivia Quiz, Window Blaster 1.0.

M34: GAMES NO. 9. 1000 Miles, Asteroids, Cairo ShootOut!, Donkey Doo, Duck Hunt, Pente 1.0.

M45: GAMES NO. 10. Blackjack V4, Gunshy V1, Humpback, New Social Climber, Panic, Puzzle V1, Star Trek Trivia Quiz, Video Poker.

M51: GAMES NO. 11. Bouncing Balls, Fire Zone, Mac Word Hunt 2.0, Out Flank, Risk and Word Search.

M53: GAMES NO. 12. 3D Checkers 2.0, Bills Casino, BMX-The Racing Game, Helo-Math, Mouse Craps.

M58: GAMES NO. 13. Klondike 3.6, Space Station Pheta, Mac Concentration, Sitting Duck, Hot Air Balloon 2.1, Think Ahead+2.0.

M60: GAMES NO. 14. Golf Solitaire, Mac Football, Euchre 2.2, Gomoku, Pyramid, Checkers, Runaround and Macpuzzle 1.0.

M19: PINBALL CONSTRUCTION SET GAMES. Pinball Construction Set Player plus

12 Games: Apple, Black Hole, Face, KalinBall, Madonna, Minute-Mag, Patchwork Mess, Phantom, Pure-Gemme, Samurai, The Royal Pain, Wizards Lair.

M29: PCS GAMES NO. 2. Pinball Construction Set Player plus Games: Circus Circus, D &D , Diadora, Max, Merlin, Modern Mistress, Queston, The Royal Pain, Twilight Zone, Whazit.

Adventure Games

M17: DUNGEONS OF DOOM 4.0. Graphic adventure game.

M23: VAMPIRE CASTLE. Graphic adventure game.

M24: DEEP ANGST. Graphic adventure game. 1 Mb ST only.

M31: BLACK WIZARD. Graphic adventure game by Richard Loggins.

M36: CASTLE OF ERT. Shareware graphic adventure game.

M40: HACK, Version 1.03. Game is similar to Rogue, includes manual with full docs.

M41: RADICAL CASTLE. Graphic/text adventure game.

M63D: MOUNTAIN OF MAYHEM. A super graphics/text adventure game.

M65D: DEEP ANGST II. The sequel to the first graphics/text adventure only this version is much larger. Over 100 locations to visit.

Graphics

M10: GRAPHICS NO. 1. Amy, Artisto, ball demo, Big Ben, Brooke, Bugs, Curves, Display Message, Dragon, Fighting 51, Fourth Dimension, GARF, HotSex!, Liar's Club, Living Art, Max Headroom, Moire 3.0, Nightmare, Optical Illusion, Paint Grabber, Painter's Helper #1, Pattern*, Pisces, Rotations, Saddle, The Fourth Docs, ViewPaint 1.5.

M12: MACBILLBOARD. Chipmunks, Donald & daisy, Goofy At Bat, Announcement, Babe Ruth, Carrotprint, Classic illusions, Escher, Escher Hands, MacBILLBOARD (MacPaint clone), Max, Mickey and Minney, mm, Quick Tour, T-Shirt.

M22: GRAPHICS NO. 2. BlowUp 3.0, BlowUp Notes, CalendarMaker 2.2.1, Dynamo, Graphic, MadMenus, Math21, Rays, Simutree, Spiro, Tree, Vanlandingham.

M26: GRAPHICS NO. 3. 3D Sketch, AniRama, Bin/Graphics, Brownian Motion, Control, Fractal Contours, Fractals, Icon Collector, Julia, MakePaint, Melting Clock, Small View, ShapeArt, StarFlight, Window Demo.

M47: GRAPHICS NO. 4. Cursor Designer, Earthplot3.0, Graphics2.0, Mondrian1.0, MotionMaker2.0, Moving Finger, Wallpaper, Zoomation.

M57: GRAPHICS NO. 5. Contains 6 graphics-oriented applications or DAs: Micro Film Reader 1.4, Bomber, Iliana II, Preview, Super Ruler 1.1, and XVT-Draw.

Font Disks

M13: FONT DISK NO. 1. Akashi, AlgBlurb, Algebra, Athens, Boxie, Dover, Geneva, Hood River, ImageWriter, LED, London, Los Angeles, Luxor, Mars, Monaco, Park Ave, Pica, Ravenna, Rome, Runes, San Francisco, Seattle, Steel Brush, Ultra Bodoni.

M14: FONT DISK NO. 2. Bookman, Courier, Coventry, Dali, Genevaa, Hebrew, Manteco, Shadow Box, Sri Lanka, Times, Walla Walla, and font display 4.6 w/docs.

M16: FONT DISK NO. 3. About Lachine, Alice, Avante Garde, Berkeley, Broadway, Camelot, Cartoon, Centura, Chancery, Eon, Exeter, Fallingwater, Fantaste Key, Fantaste!, Future, Ham, Helvitica, Hollywood, Lachine, Lineal, Madrid, Pittsubrg, San Quentin, Silicon Valley, Stencil, Unicol plus DAFont2.da and SysFonts.da.

M32: FONT DISK NO. 4. Canberra, Chicago, Humanistic, Music, New Dali, Palencia Application, Palo Alto, Pioneer Shadow plus F/DA sorter and Font Tester.

M35: FONT DISK NO. 5. Beehive, Beverly Hills, Boise, Chicago, Courier, DeStijl, Ham, Happy Canyon, Helvitica, Mod. Chicago, Old English, Square Serrif, Sri Lanka, Worksheet.

M42: FONT DISK NO. 6. 15 new fonts: Berlin, Boston II, Courier, Dorza, Highwood, MicroBoston, MiniBoston, New York, Palo Alto, Sparta, Stiletto, Symbol, Tatooine, Venice, Wartburg.

M44: FONT DISK NO. 7. 18 new fonts: 42nd Street, Aldous, Art Deco, Ascii, Blockbuster, Border, Clairvaux with docs, Coptic, Deep Box, Ivy League, Klingon, Las Vagas, Little Box, Madrid, Memphis, Minneapolis, Rivendell, Spokane.

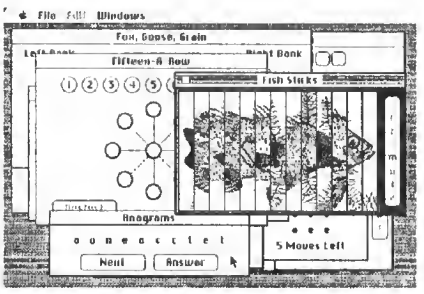
M50: FONT DISK NO. 8. Alderney 9-48; Cairo 18; Cyrillic 12; Greek 10,20; Paint 18; Playbill 12,18,24; Rehovot 10,12,20,24; Runes 12,24; Washington 12; Zodiac 18.

M61: FONT DISK NO. 9. New Century 10-24, Helvetica 10-24, Columbia 9-24, Minneapolis 36, Creamy 10-24, Palatino 10-24,Detroit 24, and Zap Chancery 10-24.

M64: FONT DISK NO. 10. Contains York 9-72, York Text.Intro, York Doc.McWrite, Paint 18, Miscpix 24, Icon 12, Cupertino 24, Arabic 24, Fallingwater 24, Schematic 24, Moscow 12, and Isengard 18.

Clip Art

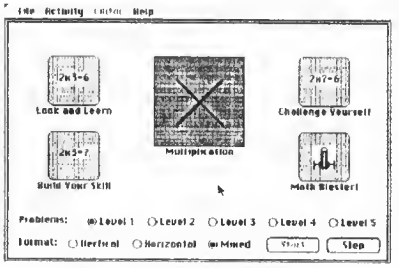
M33: CLIP ART NO. 1. AirCraft, Business, Car Logos, Cars & Trucks, Clip Art Demo, Disney, Eyeballs, Flowers, Misc, Seasons,Trees1, Trees2, ViewPaint 1.5.



M62--Blob Manager Demo

M52: CLIP ART NO. 2. 27 files: Al&Jimmy, Americana, Arrows, Bigger Guys, Billboards, Borders, Cars, Cartoons, Cats, Celebrities, Egret, Famous People, Farm Animals, Good Guys, Gorilla, Hopefuls, Little Guys, MacLectic Clip Art, More Little Guys, Presidents, Rain/Chef, Skier/Football, Skylines, Space/Race, Statues, Tennis/Running, Wine & Beer.

M55: CLIP ART NO. 3. 26 clip art docs in MacPaint format: Animals, arrows, books, business, calendar, computer, disk, files, geography, holiday, houses, icons1-6, mail, memo, misc1, misc2, money, music, office, people and symbols.



M62--Math Blaster Demo

Commercial Demos

M37: MAC-A-MUG PRO DEMO. Version 1.0, Create your own mug shots by combining a variety of different facial features.

M38: VIDEO WORKS PLAYER NO. 1. PD player for Video works animated screens. Includes 11 movies.

M39: DEMO DISK NO. 2. Demos of **Anatomiser** (learn human anatomy), **DeskPaint** (desk acc MacPaint clone), and **SuperPaint** (graphic program with both MacPaint and MacDraw features).

M54: DESIGN. Full working version of the program Design (no save feature). Includes 5 samples and full documentation.

M59D: DEMO DISK NO. 3. Demo version of **Kaleidagraph** and **Geographics II.** Double-sided disk.

M62: DEMO DISK NO. 4. Contains a limited feature versieon of Math Blaster (an educational game) and Blob Manager Demo (contains 15 unique puzzles demonstrating the power of Blob Manager.

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M48D: HYPERSTACKS NO. 1. Address, Databook, Fractal, Funy Day, Home Desk, HyperNews 1.2, HyperZoetropes, MacGallery, MacVermont #2, Notebook, Periodic Table, and ResEdit IPS. (Double-Sided)

M49D: HYPERSTAKCS NO. 2. Ear, Illusions, Passing Notes, Shipstack, Silly, and US States V2. (Double-Sided) NOTE M48 and M49 require HyperDA and some form of DA tester (Sample It! on M46 or DA Tester 1.5 on M8 or M18).

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Order disks from CN Library, 122 N. Johnson Rd., Sterling, VA 22170. Disks are $4 each. Add $1 per every 6 disks for S&H.

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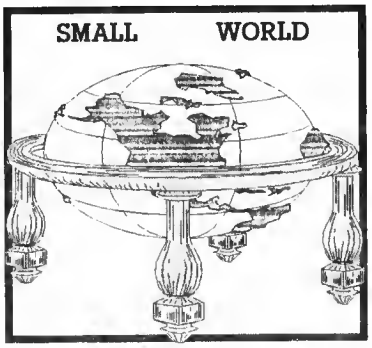

War Inside The Computer

By: David & Sandy Small

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Introduction

In the past few columns, I've been fairly restrained, a bit formal if you will. Nice little stories about the dark side of bulletin boards. Awards for the development of the Spectre.

While all this mellowness is nice and respectable, it can be a trifle boring.

So, for this column, I'm locking and loading, taking the safety off, switching the selector to "full-automatic", and letting go. Hang on...

What's programming all about?

Some people have this idea of programming as a set of cold, theoretical principles, formed into approved algorithms, daintily laid down in "structured Pascal," and compiled by some poor enslaved microchip somewhere.

That's how programming's taught, anyway. I'm the victim--with a Bachelor of Science (appropriately titled, "B.S.") degree--of a computer science department at a major university.

'taint so. Jack Tramiel says "Business is War". Awww, phooey. Business is giving people something for their money.

The truth is, programming is war!

Let's take for instance my latest little hack, the Spectre 128. I did not idly stroll across a grassy campus on a sunny day, working out algorithms in my mind, sit down in a New Age music-filled room, and touch-type in the code using Pascal. Oh, no.

The development of both the Magic Sac and Spectre more resembled a knife fight. It was me against cold, evil, doubtlessly Communist chips, doing everything in their power not to work.

Dave Slags Pascal

To understand the evil of the Apple ROM chips, you have to first understand Pascal, for the ROMs were written largely in Pascal.

Pascal crawled out from under a rock in the early '70s, and spread like a disease through college campuses, corrupting the minds of thousands of innocents.

The creators of Pascal were appalled by "unstructured languages." To them, the programming world was a jungle. No one followed any "rules." There were no "standards." No one "conformed."

Unstructured languages, like Basic, allowed the programmer to basically do whatever the heck he wanted to do. Go to anywhere in the program, any time. Jump around in clever ways. Get stuff done.

"Oh, fooraw!", said the Pascaldroids. With a true bureaucrat's love of Absolute Control that would make Big Brother cringe, they began a campaign to take away a programmer's freedom of movement.

First came the slogans. "Spaghetti coding!" "Bad programming practices!" "What's important isn't whether or not you get the job done; it's how the code looks!"

And in the greatest snowjob since Lyndon Johnson's campaign ads, the Pascaldroids put across The Big Lie: You should break down every program into a very few control structures. If-then-else. Do-while. And the dreaded GOTO was banned.

More slogans. "Control Structures." "Elegant." And the worst atrocity of all: "Self-documenting code." This one is the worst; it assumes the next person to read your code is a near telepath, who can somehow divine your program's purpose by looking at your code, not your comments.

☞**Small's First Law**: There is no such thing as self documenting code. If you don't have more comments than code, you're blowing it.

What the Pascalzealots never, ever, ever talked about was the layer of separation put between you and the computer when you went to Pascal. The speed of programs dropped, because the Pascal compilers generally created junk code. You never could find out anymore just why the computer crashed anymore, unless by some miracle you found a bug in your Pascal code.

You couldn't just type RUN to find out if your program worked. Oh, no. You had to learn some silly editor, type in your code, then run it through a compiler, then through a code generator, and wait for some slug-like "P-Code Interpreter" to deign to execute your ideas.

Shortly thereafter, Pascal became a religion. Programmers were removed from direct control of their CPU's, their programs were

forced to slow down, and rarely did they know what was going on at the bit level.

Hence, Pascal is the 55 mile per hour speed limit of computer languages.

The same stupid politics apply as with 55. "It's for your own good." "It's for your own safety!"

I heard this Big Lie often through college; I escaped just before Pascal became mandatory. By this time, Pascal had become The Clique in the computer sci department. It was forced on programmers with techniques that would make TV evangelists gag. If you didn't code in Pascal, you were somehow less than macho. If you didn't code in Pascal, you weren't part of the New Wave, you belonged to the past. Why, I had one programmer-to-be tell me that "Programming in Pascal is like wearing a self-imposed straight-jacket."

To put this in perspective, imagine if your daughter is going out with a young man tonight. He comes to the door. You welcome him in. You ask what he does; he says, "I wear a self-imposed straightjacket." What tripe.

☞**Small's Second Law**: The truth is, it is possible to write good or bad code in any language. It is possible to apply structure rules in any language.

☞**Small's Third Law**: Any programmer silly enough to straightjacket himself belongs in one.

Only mass conformism gave us Pascal. But soon, the Truth about Pascal began to seep out, in quiet underground movements. Oh, if you dared stand up and say, "Well, I LIKE Basic," you'd be pulled down by the baying Pascal hounds. But evil things were whispered. "Pascal is so inefficient my programs take forever to run." "There are things I can't even DO in Pascal, like mixing types, when I bloody well need to!" "Jeeze, did you see that? My little Pascal program is a 100K long when it's compiled!"

The sad, sad truth was, Pascal was a language with Very Little Mind, to quote Winnie the Pooh. All the religious sayings, all the bleatings about how good it was for you, paled against cold reality: An assembly language programmer could write code that ran circles around Pascal. An assembly language programmer could write code that was vastly smaller than Pascal code. And an assembly language programmer could do many things that Pascal could not even do.

So, the quiet underground movement began, among people smart enough to realize that PascalHype was Hype. For the people unafraid to rock and roll at machine speed, assembler became the way.

- *Lotus 1-2-3* was written in assembler.
- *Wordstar* was written in assembler.
- *dBASE* was written in assembler.
- *XyWrite* was written in assembler.
- Darn near every arcade game was written in assembler.

Am I getting through? *The programs that made people rich were written in assembler.* The programs that screamed with speed were written in assembler. The programs that made you feel your computer was a hotrod, able to leap tall buildings in a single bound, were written in assembler. Those programs SOLD because the users liked the "look and feel" of them. They felt hot and sexy.

Brooke Shields does NOT sell posters because she is Structured. Elegant. And Wearing A Self Imposed StraightJacket.

Don't Look Now, But Here Comes The '80's

Now let's get to the 80's. People started dropping Pascal in droves. The limitations were just too much of a pain. "C", a Pascal language that was actually efficient and fast, and let you do whatever you want, took over, and today is skyrocketing in popularity.

Enter Apple. Apple liked Pascal. Apple liked Pascal A Whole Lot. They made a computer called the Lisa.

Whenever anyone turned on Apple's Lisa machine, whose operating system was written in Pascal, they all had the same comment: What's taking it so long? Why is this thing so slow? And the ultimate: How could they have slowed down a 68000 ***this*** much?

So it came time to do the Macintosh. The drawing routines were written in Pascal, then optimized into assembler where there were bottlenecks. They ended up being 60% of the Mac's ROM (prestored memory). The operating system ended up being written mostly in assembly, for speed.

But the machine, unfortunately, retained a nasty Pascal flavor to it. You had to beg the machine for memory to load your program into. You had to plead with it not to roll your program out of that memory, once you'd gotten it there. Your program would be shifted around in memory underneath you at more or less random times. And all of this is justified in prim, self-righteous tones throughout the Mac documentation as "being good for you."

You couldn't do something easy, like PRINT "HI THERE"; oh, no. First you had to initialize the memory mangler, the heap, Quickdraw, open a GrafPort, set the font, set the font size, set the font characteristics (bold, italics, etc), start up an event handler, read in a

resource with the text "hi there" in it, then, possibly, maybe, you could print "Hi There". It takes nine pages of Pascal to print "Hi There".

You may have heard the Mac is the hardest-to-program machine around; in my humble opinion, that's the Pascal heritage showing through.

Pascal forced programmers to do things just one way, in the idiot control-freak dream of Standardizing Programs, of basically one person saying, "I vant everyone to do it MY WAY!" If you'll recall Nikita Kruschev pounding on the U.N. table with his shoe, you've got a good idea of how standardization committees like to control programmers.

Most of the time, that one way ended up being foolish, ended up making the programs long and slow. The Mac does the same silly thing to programmers.

And this is why every Mac program you read about is "delayed another three months." Or "still pretty buggy." Or "Well, we've dropped the product."

Dave Slags the ROM Chips

So, now, take those ROM chips, with their cold fascist heritage, and plug them into the ST, as I did back in 1985. (It was easy back in '85; they plugged right into the TOS ROM sockets, since there were no TOS ROMS.)

Do you think they appreciated it? Oh, no. They acted exactly like a KGB agent who's been kidnapped and forced to live in the US.

The chips look around the ST bus. Why, there's a good fast hard disk out there. There's a really cool monochrome video display, done properly, not some kludgy way that slows down the processor. There's a fast floppy disk drive.

Do the chips appreciate it? Imagine a KGB agent eying a Kentucky Fried Chicken stand distastefully, and you'll get the idea. The agent is horrified at the lack of standards, the lack of control. Why .. why.. there's not even a dress code here!

The chips declare a jihad; their purpose in life becomes Crashing. In short, they are so unable to adjust to life in the ST that they adopt a mutual suicide pact.

They sit in the computer, plotting far into the night just how they're going to fail. Let's listen in.

"Comrade Lobachevsky! What haff you got?"

"Vell, sir, the disk drives seem to be uncrackable. However, the disk format routine isn't solid, so we could crash there. And there's real possibilities with the serial chips."

So, the next day, someone tries to format a disk in Mac mode. Whammo. The crash page scrolls up, the chips breathe a sigh of relief, and quit.

And later on, someone tries to run a terminal program that goes straight to the serial chip. Crash.

I threatened the chips. I hooked them up to the 110-volt wall outlet through a switch, and said, "Obey, or else!" They sneered, said, "Go ahead and throw the switch, Imperialist! We show you how Pascal Chips die!"

Well, that wasn't going to work. So I started building fences around the chips in software, limiting their freedom to do dirty work.

"Comrade Lobachevsky! Report! You said you were going to crash today!"

"I.. cannot understand it, Comrades. Today the serial port was taken away from us. I tried all the functions, and they all worked."

An evil-looking fellow, Comrade Borodin, speaks up. "I haff a solution. Many progwams accidentally write into location zero. On this machine, that vill wesult in a cwash. Thus, the system will newuhr be stable."

At this, the meeting dissolves into laughter.

Next day, I'm running *Microsoft Excel*. Crash--store into zero.

It looks like I'm stuck. The Motorola manual is quite clear. Storing into zero gives a Bus Error, and you cannot recover from a Bus Error--in fact, you need to get a 68010 chip to be able to recover. (All you hot computer sci types--that's so you can implement virtual memory, paging in off disk.)

So, I neatly close the Motorola book, and go try to recover from a Bus Error. Why, golly, the book was wrong. I go ahead and write some software, and ignore the store into zero. It isn't easy, but it works.

The ROMs are in deathly horror now. "Comrade Borodin! Ve haff stored into location zero fifty times today, and there are no crashes! Guard! Take Borodin to the firing squad!"

(Sound of AK-47 fire).

And so it goes. As the chips discover another way to die, I fence that way off. As Mac programs do one knuckle-headed trick after another, create problems that crash even real Macs, I trot around behind them with my pooper-scooper, picking up the debris.

With the Spectre 128, there are demilitarized zones, fences, landmines, tripwires, booby traps, warnings, and more. The ROMs are in a prison camp pretty much. Sure, evil plans are still being hatched; they've found some way to mess up "Page Preview" on *Microsoft Word 3.02*. (128K ROMs only). And sometime soon, I'll find out how they did it, and drive a stake through it's heart.

But it's been a struggle the whole way, a war. I've lost a lot of battles, and there's still a few things that won't ever work--Mac MIDI, for instance--but overall, I've won the war.

Conclusion

So there you have it. A brisk discussion of Pascal that will make the blood pressure spray out the

ears of any Pascal lover. The real grim truth of what those Apple ROMs talk about at night. And a look into the bizarre, twisted psychology of an assembly language programmer.

If you'd care to comment on this column, and drop me a note online, follow the following program to end up with my address.

```
IF {LANGUAGE(Favorite) == PASCAL} &AND&
   {EMOTION = OUTRAGE}
     DO
          Compuserve address = 00000,000;
          GENIE address = Nil;
          Usenet Address = ping!pong;
ELSE
          Compuserve address = 76606,666;
          GENIE address = DAVESMALL;
          Usenet Address = (whatever)!well!dsmall;
ENDIF
```

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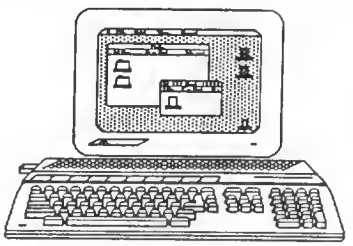

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WAACE THROWS A PARTY!

ATARIFEST '88: Another Delightful Success in Terms of Both Attendance and Sales

By Gregg Anderson

You always know when it's fall in the WASHINGTON DC area. The leaves start turning, the tourists head for home, Congress begins to forget its summer promises, and WAACE turns its October AtariFest loose on an unsuspecting population.

WAACE (the Washington Area Atari Computer Enthusiasts) is an umbrella organization made up of six independent Atari user's groups. These include (at last count anyway) NOVATARI, FACE, MACC, AURA, WACUG, and GRASP. Among them, these six clubs cover as wide a range of interests and talents as any Atari group in the United States. Best of all, WAACE isn't just a passive "stay at home" outfit. Each year (and for most of that year) these six clubs plan and execute one of the most well-known and best attended Atari Computer shows in the nation.

I was fortunate enough to be in the DC area in early October and got to enjoy the show first hand. Best of all, I was able to help set up a few of the displays and even sat in at the Atari booth for a while during the show. The amount of pure physical effort that goes into putting this type of show together is phenomenal, and the planning and brain-storming that precedes it is indescribable. My hat is off to the folks that put this show together, and to those already well into the plans for 1989's festival.

Held at the Fairfax High School, the show managed to fill most of the entire complex for two very busy days. Of the two show days, Saturday was by far the busiest day, with much of the school packed in "wall to wall bodies." Despite the crowd, it wasn't difficult to find your way around the show.

As you entered the main entrance of the school you were met by, what else, greeters from the various clubs that make up WAACE. After receiving a numbered ticket for various door prizes given away throughout the show, you wandered down a long hallway past tables set up by the individual WAACE clubs. Here you had the opportunity to join the club of your choice, buy PD software disks, pick up T-shirts, have your photo digitized and put on disk, and much, much more.

Lots of Clinics and Demos

Reaching the end of the hall, we headed left towards the classrooms. Here were located the various clinics and demos put on by the user groups. What can I say? These were VERY well handled and generally enjoyed a constant stream of visitors. The demos and clinics being given included: Education and Applications for the Disabled, OS/9 and Windowing, Desktop Publishing, Telecommunications, 8-Bit Productivity, 16-Bit Productivity, Emulations, Programming (from ST Basic to Assembly), and a Swap Room.

Between one thing and another, I did not have a lot of time to go visiting and missed some of the clinics, but those that I did spend time with were great. In the **Telecom room** we had Darlah Hudson of the GEnie BBS. It's now Darlah Pine, by the way. (Congratulations, Darlah, but you know you broke the hearts of several thousand Atari BBSers when you got married, don't you?) Darlah had a GEnie line up and running all during Saturday's demos and gave a lot of folks a chance to get some first hand experience working with the GEnie BBS.

Not far from the Telecom room was the **Macintosh emulation** room and within it, Dave Small. No longer connected with Data Pacific, Dave now heads (together with his wife, Sandy) the new "Gadgets by Small." "Gadgets" had its first product, the new "Spectre 128," a much-improved Macintosh emulator using the more powerful 128k ROMs from the Mac SE series. Behind Dave's table, and working totally independently from him, stood a tiny nine-year-old girl pushing 128k ROMs from under a trench coat. It was rather unsettling to have this angelic munchkin come up and ask, "You wanna buy some ROMs?" Unsettling or not, I wasn't about to let that chance pass by. She only had a few ROMs to sell though (or rather her father did), and those were quickly sold out. For those who missed out,

Pre–Owned Electronics was taking orders for 128k ROMs so the things are available. I'm not sure how many Spectres Dave sold at the show, but having seen this product, I'm taking bets that it will be a major success.

Hidden out in the "boonies" was the **Programming room**, headed by Ken Whitesell. Ken programs for a living and has adopted the ST as his favorite "small" system. Though he prefers the advanced languages like C, Pascal and Assembly, Ken was willing to dig out ST Basic and help answer any questions anyone had about it. It was like pulling teeth, though. Need I mention that Ken isn't too fond of ST Basic? I think he compares it to S & M whenever he has to talk about it at all.

One room was set aside for **8–Bit productivity** applications. *SynFile*, *SynCalc*, Video Digitalization systems and Springboard's new *NewsRoom* were all being demonstrated to a steady flow of interested Atari users.

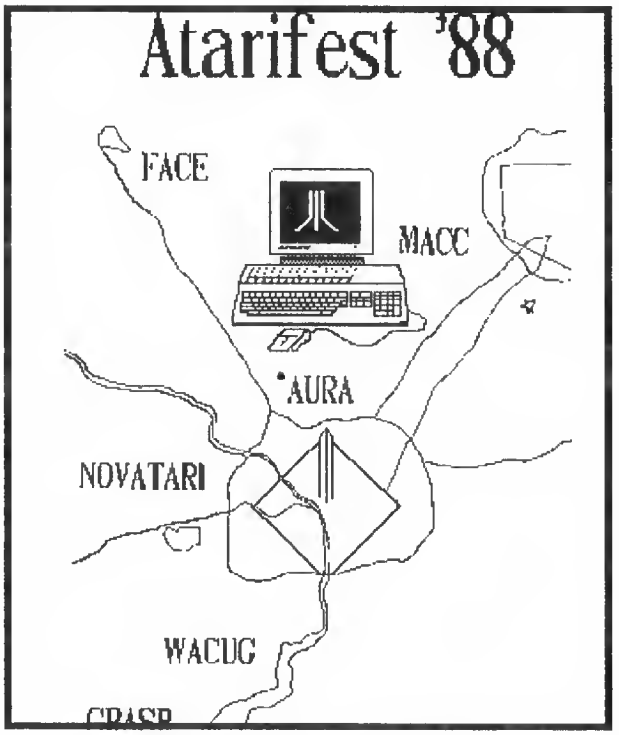
There were more demo rooms than I've mentioned, but these were the only ones I was able to spend any real time in. Sorry about that, but I've learned the hard way that the folks that work in a show like this almost never get to see any of it.

A Buyer's Paradise

After leaving the demo and clinic areas, you entered the school's lunchroom and into an area that was, quite literally, overflowing with vendors. From the local area were retailers such as Cal Com, L & Y Electronics, Applied Computer Associates, Toad Computers, Morgan Communications Products, Diskcovery, and even Joppa Computers. Some of the major Atari supporting companies present were Analog/ST–Log, Astra Systems, Current Notes, ICD, Michtron, Nite Lite, Omegasoft, Michtron, Portside Personal Computers, Word Perfect and Xlent Software. Need I mention that Atari was there as well?

Atari at Atarifest

Atari was represented by Cindy Clavern (User Group Coordinator) and John Townsend (Tech Department). They arrived with 19 large boxes full of Atari computers, software, and game systems. These



systems included a Mega4/Megafile20/SLM804 Desktop Publishing System, 1040/RGB, 520/RGB, XEGS, 7800, and 2600 game systems. While games seemed to dominate the XEGS (including the new unreleased *CrossBow* game that includes a nice light–gun interface and very good graphics) and lesser STs, the Mega4 was dedicated to more serious word processing, desktop publishing and graphics demos. Demonstrated as well, on an informal basis, was a Beta version of TOS 1.4. It was a pleasure seeing this version in operation, and it banished any doubts I had about the future of TOS. When finally released (early 1989?), we should see a wide range of improvements, including faster graphics, text, screen scrolling, and MUCH faster disk I/O.

One of the funnier aspects of Atari's arrival was that none of the monitors they had brought would work with the 7800 or 2600 systems (they had composite/RGB but no RF inputs). Fortunately, OmegaSoft had two TV sets they were willing to swap for the monitors for the duration of the show. I wonder if Atari had any trouble getting them back? At any rate, the folks from Atari did a fine job here in Washington and served as outstanding ambassadors for Atari.

Software Publishers

OmegaSoft was present with an impressive new display holding their full line of 8 and 16–Bit software for the Atari line. They admitted that sales were slow at first, but sales did pick up slightly towards the end and they said they were looking forward to next year's show.

Word Perfect and **SoftLogic** were present with the latest versions of their products, though SoftLogic did admit that *Publishing Partner Professional* was still a good two to three weeks away from release.

Nite Lite was present, giving round–the–clock demos of their new multi–user BBS system for the ST, one that lets the ST act more like a mainframe than a Mini. Just check out ARMUDIC for an example.

Astra Systems was showing their entire line of ST Hard Disks, from the 20 Meg/Floppy combo to the 60 Meg expandable monster

they sell for the heavy-duty "power user."

ICD showed their FA-ST line of hard drives for the ST and the brand new SpartaDOS-X for the 8-Bit system. This new DOS deems to have it all--speed, power, flexibility, RAM conservation (comes on a cartridge rather than a disk), and more bells and whistles than you can shake a stick at. When questioned, the representative from ICD confessed to be relatively pleased with his Atari related sales. Let's hope they continue to improve because this is one outfit that's really gone all out to support us.

Michtron filled two tables with their products, everything from the original *Time Bandits* to the newest Microdeal release *Goldrunner II* with a LOT of utilities and application programs inoetween.

Best Electronics was present selling a wide range of vintage Atari products, from antique tape drives and some really vintage Atari 800 software to Atari belt buckles and new ST cables and circuit chips.

Present in large numbers at the various software retailers were software packages from Europe, packages not generally seen here in the States. Though mainly in the arcade class, these were all impressive programs with graphics and entertainment levels sure to entertain the most rabid arcade fanatic. Too bad these tend to be so hard to find here. Of course, it might be a different story if the American software outfits had the courage to give them a try. What's even more frustrating is that many of these European outfits have American branches. This American representation does not, however, seem to have had much effect. While publishers ignore the ST here in the States, they seem eager to sell Amiga and Apple IIGS versions of the same software.

There were a number of local Atari retailers present at the show. I thought I'd died and gone to Atari heaven--everywhere I looked there were Atari dealers. **Applied Computer Associates** and **L & Y Electronics** each had very busy booths on the east side, but **Cal Com** took up an entire wall with their display. Though there were no massive price cuts towards the end of the show (like last year's show), the prices were very good and generally generated a constant "feeding frenzy" throughout the entire show.

Morgan Communications Products was present but it was something of a swan song for them. This show marked their departure from the Atari market in terms of software and hardware support. They've decided to switch to programming for a living, so no more retail shop. I wish them the best and hope they do well with their Atari productions.

As the day wore on, the crowds got even larger, getting so packed it was difficult to get anywhere. Though frustrating at the time, it did show that there was a LOT of support for the Atari in the DC area. Noah's Ark couldn't have been as crowded as this--it would have sunk first.

Four Play and the Evening Banquet

Of course, the daylight hours of the show are only part of the story. There are also those wondrous night hours and the always popular Banquet. The FOUR GUYS FROM OTTAWA decided to throw a little party for those of us who could make it (and after those hours of building, standing, and talking, that wasn't all that many). Though we had to squeeze it all into a single little hotel room (actually we spread out and took over much of the hall and balcony), it was great, a real relaxer and smile spreader for all of us. I want to extend my deepest thanks to Glen, Terry, Mike and Don. I hope they all recovered alright. LaBatz Blue is as potent as it is tasty.

Of course, the high point of the night is the Banquet and the guest speaker. This one was good, the speaker that is, not the food. The food was BLAH with a capital UGH! but the speaker was well worth every penny. Dave Small found himself drafted into acting as keynote speaker and he decided to handle it in typical Dave Small fashion. After opening with a few political jokes (something of a "Pox on both your houses"), Dave draped himself over the podium and began to ramble on as only he can. If anyone else had tried to look that relaxed and spoken that softly, he'd have had the audience asleep in five minutes.

Dave, however, managed to keep us awake and laughing for close to half an hour. Some of the best one-liners were about Pascal being a "Nazi language" and how the Mac ROMs were like Storm Troopers when they entered the ST. Not content to play in their new and more open environment they need to build the same walls and restrictions they have in the Mac. Best of all was his "Ditch digging is a more satisfying job than programming can ever be. When you're done digging, you can look back and what do you see? A ditch!! When you finish slaving over 1500 lines of code and save it, what do you have to look at? A floppy that looks the same! It's all very frustrating."

The second best line was about the first day he'd been selling the Magic Sac. There he was, walking out of the show with $20,000 in cold cash in his pocket and feeling like a successful dope dealer or something. "So what happens if I get stopped by a cop? I can see it all now; 'Yes, Officer, I'm a programmer and this is just from selling a program.' 'Yea, right son. Let's take a little trip down to

the station together....'"

In short, Dave has the ability to keep any listener (or reader) riveted, and to skewer anyone with just a look, and he did more than just look that night.

After the banquet, we headed back to the party to recover from the food. Sadly, most of the good Canadian Beer and Whiskey was gone (somehow Bud Light just doesn't cut it after Labatz) and most of us were pretty burned out so it was off to bed to try and recover for the next day.

Slow Sunday...

Sunday was a lot slower than Saturday, something noticed by everyone. This was expected to some extent, what with the demos being a Saturday-only thing and the hours reserved for Sunday being much shorter than Saturday's at best.

But a Major Success Nonetheless

Even with the Sunday decline, however, the show has to be called a major success. 2,901 separate visitors registered for the 1988 WAACE AtariFest--and several hundred more undoubtedly skipped the registration booth! Although the exact numbers for last year's show aren't available, it looks like this year's show was pretty close to last year's in total attendance.

Everyone I spoke to rated the show a success in terms of both sales and attendance. Some of the retailers noticed a reduction in sales over last year's, though the rest claimed to have either "reached their goals" or "done better than last year." It was noticed that "big ticket" sales were down over last year's, but while large component sales were down, software sales were pretty good.

Without exception, the company and local retailer representatives seemed impressed by the WAACE show and expected to be back in force for the next show.

Even Atari's reps seemed impressed by our little show and were looking forward to coming back for next year's extravaganza. They admitted that the Glendale show was larger, but given the difference in areas and populations they felt the WAACE show was great and can't wait for next year.

(Continued on Page 33--see WAACE)

AtariFest Seminars

By Anne Wisnieski and John Barnes

The 1988 AtariFest seminar series gave Festgoers a chance to take a break from shopping and find out about "Atari Computers at Work" from the experts.

Brian Sarrizin of SoftLogik Publishing Company led off with his insights on the art of presenting your ideas. Given that format and message have become inseparable, user friendly and versatile desktop publishing tools are a necessity rather than a luxury. Anything less than readability, excitement, and interest from the printed word are likely to go unnoticed. Brian also gave some insights on SoftLogik's products beyond *Publishing Partner Professional*.

J. Andrzej Wrotniak, a favorite *Current Notes* contributor, stressed the importance of planning and structure in programming in his talk on "Software Engineering for Fun & Profit". *True Basic* and *Prospero Pascal* got top smiles in Andrzej's language sweepstakes. In the end, however, Andrzej assured us that the structure and organization of the program were more important than the language the programer uses.

Jeff Fowler, representing WordPerfect Corp., used M & M's, Atari WordPerfect hats, and a lot of enthusiasm, to do a great job of convincing the audience of WordPerfect's commitment to actively support all of the machines for which *WordPerfect* is made, including the Atari ST. Jeff emphasized the availability of technical assistance at 800-321-3271. The excitement of the group reflected a support from ST owners to *WordPerfect* to equal the company's support to the owners.

Charles Smeton of MACC, assisted by a representative from ICD, showed how to save money by building your own hard drive. $500 seems to be the minimum investment to get you into the convenience of a hard drive system. Building your own saves money if you need more than 20 megabytes.

Bill Price led off the Sunday lectures with a user's overview of Desktop Publishing. Bill reviewed the historical antecedents of today's technology and echoed the theme that appearance builds interest. His review of typographic principles was particularly revealing.

Jayne White, of the Software Publishers' Association, tried to convince her audience that duplicating and distributing someone else's intellectual property is a crime and that this costs the user because it drives small producers out of business. Jayne gave some facts about the Atari marketplace and described some of the work that SPA is doing to combat piracy.

John Townsend, from Atari Corp.'s technical assistance department, got pretty easy treatment from the audience in his question and answer session. He showed how some developers trip up by failing to follow the rules and he gave some insights on the new TOS.

The AURA user group handled the seminar program. Helen Weimerskirch and Anne Wisnieski moderated Saturday's presentations, while John Barnes recruited the speakers and moderated on Sunday.

The Joys of Atarifest

Oh, let me count the ways I love it!

by Georgia Weatherhead

After producing three other Fests, we were running low when four guys from Ottawa called to say they wanted to give the Fest workers and vendors a party just before the banquet. That was just the boost we needed. It stimulated the new recruiting for workers. It is rewarding, too, to have some one out of the blue appreciate your hard work. Their party Saturday before the banquet was a pat on the back for all our workers and vendors. We were sorry they couldn't stay for Sunday, but they had a 13 hour drive back to Ottawa. Imagine coming that far!

Volunteers for the Atarifest have always been far above any other organization I have been involved with. The enthusiasm of Atari computer users has been most remarkable. Just when I think certain activities must be cut back, someone comes through with offers of rooms, equipment, initiative, helping hands, or a better idea.

The vendors have been helpful too with ideas of publicity and offers of door prizes. They are surprised by the use of the High School instead of a hotel for a show. When our members were asked if they just wanted the Fests to be shows by the vendors and at a hotel, they vetoed the idea totally. They like "show biz" too. Some of the vendors now realize that the users demonstrating software and hardware in another room from the vendor hall can increase their sales. New-to-be users feel safer and more at ease with a user than with a salesman. So some of our joys are talking to possible new users and setting up a sale for the vendors.

David Small relaxed us all at the banquet with his humorous accounts of how one writes programs.

Real fun is calling the grand door prize winners. The winner of the McIntyre 520 ST System for the physically handicapped was a boy with cerebral palsy. His father had been asking about the computers because he thought his son could then do his homework more easily. His little sister was excited too. The winner of the 520ST door prize was amazed too that he could be a winner.

It is really crazy that so many people will come so far to an Atarifest. This year they came from the Dominican Republic ,Canada, Korea and 19 states. Notably missing from the sign up sheets this year were W.Virginia, Indiana, Wisconsin, Minnesota, and Florida. My humble apologies to those great users in New Jersey for not having a sign up sheet for New Jersey but they showed initiative by overwhelming the New York sheet.

Those states that had visitors making the trek to ATARIFEST '88 were California, South Dakota, Nebraska, Colorado, Texas, Arkansas, Missouri, Illinois, South Carolina, North Carolina, Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticutt, and Massachusetts. I salute you.

The new members that register for a club offer a great hope for the new year. After working so hard to show off our computers, we are rewarded with 54 new members of NOVATARI and renewals of 52 others.

The umbrella organization of WAACE grew also. A club new to us asked to join us in our efforts for ATARIFEST '89. We look forward to

Christopher Reese receiving the Atari 520ST Mcintyre Computer System from WAACE secretary Georgia Weatherhead.

J.C. Gordon receiving the Atari 520ST door prize

having the Meade Atari ST group as part of the Washington Area Atari Computer Enthusiasts next year. Perhaps we shall have a new idea for a demonstration room.

Working with Cindy Clareran, the Atari User Group Coordinator, creates authority for our show. She helped many of the UG demonstrators gather their materials. Bringing John Townsend along she gave our techies another source of information to draw from. And maybe next year we can all see the ATW and the TT.

The bargains! Wow! One gift certificate of $10 though cost our member $70 after she and her son cashed it in. There were just so many things to get.

Sunday morning I was awakened by loud honking. It was four flocks of Canada Geese flying overhead in their V formations. It made me think of the four guys from Ottawa, who must have been taking off on their 13 hour drive at near that same time.

Such are the joys of working for nine months to give birth to an ATARIFEST.

WAACE (Continued from page 31)

So there you have it, a brief overview of the 1988 WAACE AtariFest. Was it worth it? A question a lot folks ask themselves before, during and after each show and a question only they can answer for themselves. For myself, I have to say yes. It was worth the $315 plane fare, the spent leave time, the lost sleep, the last minute rush to put things together and the insane rush to tear it down and clear everything out at the end. Was it worth it all? I think so, and I suspect most everyone would have to agree.

I want to extend some special thanks to Georgia Weatherhead for helping me make the show and to Edmund Bedsworth for putting up with me and finding a place for me to stay during the show. Thanks again, folks, you made my visit to the show both possible and pleasant.

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A TEST OF WORDPERFECT

An Interview With One of WPCorp's Star Programmers, How the Company Tests Its Wares, and Problems Resolved

By Dick Biow

Testing Software -- No Soft Job

Would you like to make a living testing software for a major publisher? Do you know what the job requires? Ever wonder how a software tester tells a programmer that his latest effort bombs out from time to time, or how he goes about selecting beta testers?

We spoke with Steve Reiser a short time ago, when he headed the testing of *WordPerfect* on the Atari ST. (He's now doing Mac programming.) We interviewed him about software testing. Here are his comments:

"Our testing responsibility is divided up between two groups: what I call, 'clinical testing,' which takes place here, and testing at beta sites outside the company. Our job at WPCorp is to go through a program, read the documentation, try every function, and make sure it performs the way the docs say it will.

"Unfortunately, that operation misses 80% of the bugs, because it doesn't represent the real world--people don't just go through documents and press keys as instructed. So we ship copies out to beta sites. We do this by way of a toll-free bulletin board, because it's fast. I can put a copy up on the board that was completed by 11:00 last night, and by 7:00 the following night, I'll have a complete list of things that need to be worked on.

Selecting Beta Testers

"People who want to be beta testers are asked to apply just as if they were applying for a job somewhere: 'Here are my qualifications. Here's why I think I'd be a good beta tester.' They send us a sort of letter of intent. What we're looking for from our beta group is a wide range of hardware and needs. We definitely want a few people who write letters to Aunt Mary, but we also need some college professors, who use all of the features of *WordPerfect*. We need enough of a range to insure we're testing *WordPerfect* in real-life applications.

"The problem is finding folks who will stay with the work and keep reporting after their initial enthusiasm has started to wane. If you aren't careful, you can end up with only 15% or so of your beta people reporting, even though all they need to do is upload their reports to a toll-free data board. Frequently, the most helpful beta testers are users who have previously purchased *WordPerfect*, as opposed to folks who have been given free licenses in return for their offers to be beta testers. This has definitely been the case with the Atari version. Vince Lombardi once said, 'The more you put into something, the more you want to see it succeed.' People who have invested in a piece of software often have a commitment to its success, while people who get a copy without paying for it tend to underrate its value.

"In any case, I am probably more picky than anybody else at *WordPerfect* about selecting beta testers, because I was burned so badly with our first set. Now I do telephone interviews of all prospective beta testers, and I demand a commitment that they call the board at least once a week, even if the program is bug free. I want to be reminded that they are still alive and active. We are always responsive to volunteers, but I don't want anyone to feel offended if he isn't accepted -- sometimes we're all booked up, and sometimes we're eager to find another beta tester.

Programmers' Feelings

"It's easy for a professional tester to fall into a kind of egotistical trap, to tell himself, 'I'm here to make sure programmers measure up to the high quality standards I'm setting.' If a tester does that, he's competing with the programmers, not working with them, and they sense his attitude and quite rightly resent it, and production can suffer.

"I think we have a better relationship here because Jeff Wilson (Manager of Atari Development) and I appreciate one another's functions. From a programmer's point of view, the most important function of a tester is to protect the programmer. If a product goes out with my signature on it, that means I said that it's okay. So, if bugs appear out in the field, they are **my** fault, not the programmer's. It was

my job to catch those bugs, not Jeff's. When a programmer sees a tester in that light, he appreciates what the tester is doing. If programmers had to personally take the flak for every bad review of their programs, there probably wouldn't be any software written by anybody.

"Jeff and I have a pretty effective system: we make our relationship into a sort of tournament between us. His goal is to release a good product. My goal is to stop it from releasing, and the only way I can do that is by discovering bugs. That may sound rather silly but, by making it a kind of game, we eliminate a lot of the tension that can develop when one person is assigned to check another person's creative output -- especially when somebody like Jeff has worked right through the night trying to fix things for the next release and somebody like me has to walk in and tell him, 'By the way, the fix you just installed blew everything up.' This 'game' approach may not work for everybody, but I understand IBM groups use it effectively.

Handling Bug Reports

"When someone sends in a bug report to us, and we can't duplicate that bug, the first thing we do is see if he might have done something inane trying to work the feature he feels doesn't operate correctly. And, if so, we ask, 'Is there a way to stop him from making the same mistake in the future?' That last question can be reworded as, 'What's wrong with our documentation?'

"If the bug is real, we set a priority on fixing it. Priorities are set from 1 to 5, with a '99' classification, so that they sort properly in our data base. A "99" is a problem that's real but, because of program design, can't be worked around. Or it's a situation where the necessary code to correct the bug would cause other problems elsewhere in the program that would be more severe. In other words, 'Yes, it's a problem, but one we are going to have to live with.'

"A bug that's labeled a '1' is a malfunction that either bombs the computer or otherwise ruins data, whether that data is on disk or in RAM, and regardless of whether or not any customer has ever run into it.

"A '2' is any bug that is blatantly obvious, is contrary to documentation, and has been triggered by a customer. If a customer has activated a bug, other customers are likely to. If the same bug had only been uncovered by one of us, it might get a 3 or more, because it might never occur in the field. This defines a programmer's goal, because we will not ship a product with any known 1's or 2's. We might still ship a program containing a 3, 4, or 5, depending on how important we think it is."

[Interviewer's note: Steve's last sentence might shock folks with no programming experience. The relevant fact here is that **all** computer programs, except for short, trivial ones, have bugs in them. This goes for arcade games, word processors, military communications, and space programs--which is why scientists worry that our Star Wars defense might develop offensive ramifications.][ST Editor's note: Or self-destruct the planet.]

The Toughest Challenge

"The most frustrating problem I've ever had was probably with our spelling checker. At first it was so unstable that we couldn't even duplicate the same problem twice in a row. A programmer gets upset if you tell him, 'This does that, sometimes. Now go fix it.' You have to tell him what it does consistently, so he can trace the problem. To compound things, when we did a spell check on a 520ST, it would lock up the computer.

"So we logically assumed the problem was memory-related. But, because *WordPerfect* is so big, has so many features, and has such meager memory on a 520ST, we couldn't even load our debugger to see what the problem was. We finally had to convert a 1040ST into a 520ST, plus just 40K for the debugger. That one took quite a bit of effort. The person assigned to it spent the eight to ten hours a day over two weeks looking at the same 64K of assembly code.

The Funniest Problem

"I guess the funniest problem we ever had was 'F7-no-no,' which is supposed to exit a file without exiting *WordPerfect*. It would bomb. Then I got this cute idea that I would write a macro that would do nothing but say, 'F7-no-no,' over and over, to make it bomb. Sure enough, I caught the bug. I took it over to Jeff and showed it to him. I was very excited, because I'd found out exactly where it bombed and could duplicate it every time. So Jeff took it and put it on a hardware debugger, put my macro on, and it wouldn't bomb! So I went back and re-wrote the macro--and sure enough, it bombed--and Jeff tried it, and it wouldn't bomb. And I began to look like a fool, because one day our bug list would claim that we could duplicate the bomb consistently, and the next day it would say we couldn't. Over and over and over.

"Eventually we found out that it was a matter of timing. If the second "no" was entered at the very instant that the timed backup was supposed to occur, it would cause an interrupt where no interrupt vector had been assigned--which caused the bomb. It was so time-sensitive that the second 'no' had to occur precisely when one

specific code instruction was being carried out. We've got about 180K of code. You could say the odds against such a conflict developing were enormous, but, there it was, and it took us two and a half months before we found a cure.

Why Choose Atari?

Everybody in our Atari group is here on a voluntary basis. Each of us could have gone to another machine, but we all chose the Atari. As far as I know, we had the same reasons. We recognized the power of the Motorola 68000 CPU over IBM's technology. We liked the interface--though we don't admire GEM from a developer's standpoint. And, after hours, we like the ST's games!

"We like bringing the power of *WordPerfect* to the ST. A lot of people don't realize that the reason *WordPerfect* is such a large program, compared to *First Word Plus* or *Word Writer*, is that we have about 15-20 times the number of functions they have. The reason we aren't blazingly faster than the competition is that we have auto-formatting. We don't have a separate key that you have to hit to format the document; instead it's re-formatted every time you hit a down-arrow. The other programs scroll and format separately. *WordPerfect* would be a lot faster if we used that system.

"But we'd never trade auto-formatting for a speed gain. One of our biggest selling points in the IBM world was that we were one of the first word processors that automatically formatted your document. That made *WordPerfect*. Today, on the Atari, we may slow down somewhat to give you auto-formatting--especially in a graphics environment--but we give you the same *WordPerfect* on your Atari at home that you've grown to love at work."

THE LANGUAGE OF THE BIBLE COMES TO THE ST

Review by Dr. Jonathan Rabinowitz

A True Hebrew WP

I was in need of a hebrew word processor for my ST and searched high and low until finding the *Hebrew Enhancement of First Word Plus* in Israel. I have been so pleased with this program that I have arranged to make it available in this country.

The *Hebrew Enhancement of First Word Plus* by Impact Systems does what its name implies, it converts *First Word Plus* into a true Hebrew word processor for the ATARI ST. To use the program the user copies four files contained on their *First Word Plus* disk to the Hebrew Enhancement disk. The Hebrew Word processor program is then run.

...the cursor is now on the right side of the page and the text moves from right to left...

Once inside, the program looks and acts exactly like *First Word Plus* except the cursor is now on the right side of the page. The keys are converted to their hebrew equivalants (i.e. A= "shin", T="aleph" etc.). The text moves from right to left. The user can also easily switch between English and Hebrew without leaving the program, simply by pressing Shift-F4. No additional hardware is required because the ST has hebrew graphics built in. On many non-ST computers, users must install special ROM chips to be able to display graphics.

Printer Configuration

If you use the program with a dot matrix printer, that does not have a hebrew character set resident (built-in), *First Word Plus* downloads the hebrew characters which are contained in the printer configuration file for a given printer. The quality and style of the hebrew letters can be modified by editing the printer configuration files included with *First Word*. Many printer manuals include a section on defining characters to be downloaded. The program comes with an example of how this is done. A hebrew daisy wheel is needed for daisy wheel printers.

The current version of the program supports most of the fine features of First Word Plus with only limited exceptions. The number of footnotes is limited to 9 and only the pica ruler is usable. The program comes with hebrew/english key stickers.

This program is well suited for serious correspondence in hebrew (which was the reason that I bought it). The student of hebrew at all levels will find this program a welcome addition to his software collection. Giving this program to a child would be a great way to encourage hebrew study by making writing easier. Similarly the ST is a great machine for hebrew writing as it has hebrew graphics built-in.

{Specialized Software, 3570 Shannon Road, Cleveland Heights, OH 44118; (216)292-5260; $179; special dealer and school rates are available.}

GENLOCK

Professional Level Desktop Video

Review By Bill Moes

The Mighty Word

Genlock. The word has a certain magic for graphics enthusiasts, a magic that offers dreams of Disney-like creations, combining the imaginative possibilities of computer animation along with the reality of standard video. Genlock. A word that makes all other computer terms sound hollow and empty. True desktop video! Dynamic, creative, exciting ... and on the ST!

In understandable terms, a genlock allows you to superimpose computer graphics on standard video images. For example: you've taken your camcorder on a family vacation and have come back with stunning video shots (sounds about right, doesn't it?). A genlock on your ST will allow you to add computer-generated titles, special effects, or animation to those video frames.

Titling & Other Effects

Genlocks could also be used at public access cable TV channels for program titling and other effects. And other professionals who use video (weddings, etc.) could find a genlock of great value.

John Russell, who spent the past 1 1/2 years developing a genlock for the ST, sounded understandably enthusiastic about his device when he recently discussed it with *Current Notes*.

Citing the Cyber animation software from Antic Publishing, along with the other animation titles available for the computer, Russell stated that the ST has "the finest animation programs going now" and added that his genlock clearly "puts the ST into the desktop video world."

In addition to the excellent graphics and animation software already available to the ST community, Russell mentioned that software developers were working on programs to be used specifically with his genlock device.

FCC Approval

Russell's genlock is a plug-in board to cost approximately $400. It will be initially available only for the Mega ST. The first units will be bundled (Mega ST and installed genlock board) and will be sold by JRI (John Russell Innovations). It's all waiting for FCC approval (a familiar phrase to all computer users). The package should be available, though, sometime this summer. Later, Russell plans to have the board available separately for user installation, a solderless process.

Near the end of the year, he hopes to have a genlock available for most other ST's (520 ST-FM and 1040 ST), although he cautioned that users who have installed certain memory upgrade boards may have a problem in also installing the genlock board due to space considerations. If you have an ST with a memory upgrade, you'll have to check out your specific situation. Some memory upgrade boards could be a problem; some will not.

Russell, whose background includes research and development with electronic test equipment, mentioned that the very early 520 ST's would probably not be able to work with the genlock because of the way those computers were initially assembled and the assembly variations since then.

In mildly technical terms, a genlock allows you to have video-in as your external source signal. The genlock will then reconfigure the machine timing to produce RS170 output. Timing is used by a computer to determine when things happen and at what level.

A genlock, then, is used to lock the computer to your external video source so you can superimpose computer-generated images on those external video images. You'll then be able to view the composite image on your RGB monitor and tape them with a second VCR.

The genlock, incidentally, will work in either the ST's low or medium resolution. It will be totally transparent to the ST when it's not being used and, therefore, should not interfere with normal software programs. Russell added that a full list of the genlock's features can not be made until it receives final FCC approval.

So the promise of true desktop video on the ST should be soon met. We've watched as other computers, those without the powerful and sophisticated family of graphics software found on the ST, have had genlocks available.

And now it's the ST's turn. And ours.

[John Russell Innovations (JRI), P. O. Box 5277, Pittsburg, CA 94565 (415) 458-9577]

A-Chart

Create Eight Kinds of Graphs and Charts

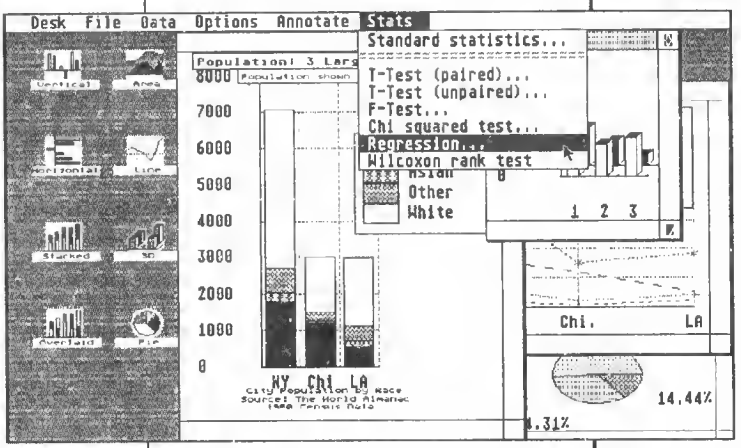
Review by Bill Moes

There are three kinds of lies: lies, damned lies, and statistics.

Benjamin Disraeli gets credit for that line. We hear the quotation's humor because we've seen its sense. But in our ongoing battle with terminal cynicism, we know that if statistics can be used to present a lie, they can also be used to propose a truth. So we accept their value, even as we're critical of their interpretation.

And there's often a need to go beyond mere lists of numbers for that something worth a thousand words. Charts or graphs can make statistics and sets of numbers understood quickly and easily.

A-Chart makes the development of charts and graphs relatively easy. Data can be displayed in eight forms: line and area graphs; vertical, horizontal, stacked, 3D, and overlaid bar charts; and pie charts.



The first step, entering the data, is easily done and any mistakes can be edited. Once the data file is ready, select one of the eight chart/graph types and display the entered data. By simply clicking on one of the screen's icons, you can then switch the display from one type of graph to another. A legend, labels, or other text can also be added. The size of a graph can be changed and the graph itself can be moved around within the GEM window.

It's possible to have up to 20 sets of data displayed on one graph. With four possible GEM windows each showing a different graph, there can be a total of 80 data sets shown on the screen. A 512K ST allows 30,000 actual data points; a 1-MB ST offers at least 100,000 data points.

On a line graph, you can edit the line style. By erasing all of the line pixels in the edit phase, you can create a scatter diagram, showing only the actual markers, not the line connecting them. With other graphs you can edit the fill style on a 16X16 grid. This opens up some creative possibilities. You could, for example, include recognizable logos for the data rather than standard pattern fills.

A-Chart, not copy protected, has other features you'll find very useful. Individual data sets, labels, fill patterns, or entire graphs can be saved to disk. Data sets can also be printed. And, with options for size and paper position, *A-Chart* will print a graph, but you'll need an Epson-compatible printer. Or you can save the entire *A-Chart* screen in Degas format, essentially a screen snapshot.

If you have a spreadsheet that saves in .DIF format, you can transfer data between that spreadsheet and *A-Chart*. Math formulas can be used to create a data set and it's possible to include a grid with some graphs or to highlight one slice from a pie chart. The X- or Y-origin of a graph can also be changed.

A set of statistics for an individual data set can be displayed. And statistics comparing two data sets can be shown. Unfortunately, statistics can only be displayed, not printed. The program runs in medium resolution color and high resolution monochrome. It's too bad that low resolution isn't also supported.

Yes, *A-Chart* has a few weak areas. I've mentioned a couple and you'll probably notice others as you become familiar with the software. You'll find ways to work around some of them. And the others? Well, let's put it this way: the list price for *A-Chart* is $19.95. So we'll call it a bargain.

True, not all the graph styles and capabilities you'd like may be available. Yes, I would like to see keyboard alternatives to the mouse. And, while the 30-page documentation will get you started, it sure doesn't go beyond that. Perhaps it would even be helpful if the "memory used" box on the main screen worked.

But at the price, it's close to a "can't lose" situation, even if it isn't the ST's ultimate graph-in-a-box. Anyone interested in conveying numerical information in an easily understood form should pick this one up. Businessmen ... educators ... desktop publishers ... students ... bargain-hunters ... the curious: pick this one up. I think you'll find it useful. Maybe even fun. No lie.

[Antic Software, 544 Second St., San Francisco, CA 94107 (415) 957-0886]

QUIZ WIZARD ELITE

A Construction Set For The Mind Set

Review by Bill Moes

Quiz Wizard Elite lets you easily create your own quizzes and tests. With the program's flexible design, it could be used by students to help in the study of a school subject or as a programmable trivia game at parties.

Create. While the *Quiz Wizard* disk has more than 700 questions on standard learning subjects and trivia, the real fun and value come with creating your own little challenges. It's an easy process. Give the file a name. Write a question with possible answers. Note the correct answer. Repeat for the next questions. Finally, save the file to disk. Yes, you are prompted through all the steps.

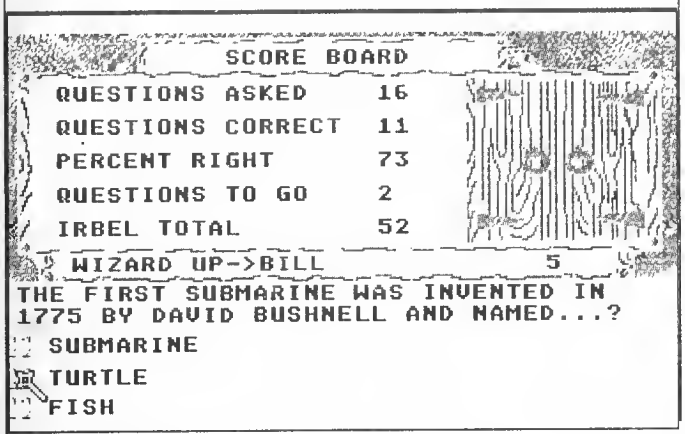
The process is direct, although it does limit you to short questions and very brief answers. The questions can be two lines long on the low resolution screen. You can also show three possible answer choices.

By taking advantage of the available options, the questions can be in different forms: multiple choice, true/false, fill-in-the-blank, or short-answer. It generally works out best, however, if all questions in a single file are the same type.

Game. One to four players, or teams, take turns. First set the number of questions to be used. With more than one player the questions will be divided so none is repeated.

A randomly selected question is shown and, if it's multiple choice, three answer choices are given. For multiple choice, the player will click on the answer. Answers will need to be typed if the quiz requires exact spelling.

If the answer is correct, a digitized voice says "Correct" and the king nods his head. If not correct, "Incorrect" is spoken with a shake of the head. With an incorrect answer, sometimes the king will also stick out his tongue. While kids will probably laugh at that, I don't think it's very appropriate. It's too bad the designers weren't a little more creative there. Points earned with correct answers determine the winner and scores can be printed.



Other Notes. There are modest editing features available when you're writing your own quizzes. Both the quizzes and answers can be printed. They print on the left half of the paper, so teachers may want to combine a couple of pages side-by-side before copying the printouts for class use. Questions are printed in the order they were entered in the quiz file.

By combining both drop-down menus and typing, there is some necessary switching between the mouse and the keyboard. This is probably more of a bother to adults than children, though.

I occasionally heard the sound of a repeating keyclick while playing. This didn't seem to interfere with the game and would go away when certain menu items were selected.

The six-page documentation is sufficient, although not very well organized or clearly presented. The questions already prepared on the disk include basic math facts, geography, states and capitals, TV, sports, films, and general trivia. The disk is not copy protected. A color monitor is required.

Summary. *Quiz Wizard* ($34.95) is a useful program for those after some help in learning briefly stated, or trivia-style, facts. Its true strength is with its write-your-own design, so parents who spend time preparing their children for school tests and quizzes should find this program to be very helpful.

Although the game format used is simple and not very sophisticated, *Quiz Wizard* could encourage many students to spend some extra time in preparing for those graded efforts. And that extra time will often make a valuable difference.

[Astra Systems, 2500 S. Fairview, Unit L, Santa Ana, CA 92704 (714) 549-2141]

UNIVERSAL ITEM SELECTOR II

A Good Product Nears Greatness

By John Barnes

Introduction

In May of '88 I characterized *Universal Item Selector* as a "must have" item for people who cared about their disk files. The folks at Application and Design Software have since come up with a new version, and the analysis is more true than ever. The way in which this product, *Universal Item Selector II*, crams new functionality into the old space can best be described as cunning.

This product has reduced the clutter from open file windows on my desktop and largely freed me from the necessity of roaming around looking for files. The annoyance of having to exit an application in order to move files to the right place is gone.

Misplaced files, extra files, obsolete data and similar trash can be fixed while you are thinking about it.

What Good is a File Selector?

For those who came in late, the File Selector is an important operating system function that allows the user to specify what file an application is to operate on. Click on the file name in the file selector box and you will be able to do your art work, word processing, database management, or whatever it is you had in mind.

In addition to selecting a file, *Universal Item Selector II* allows you to Move, Copy, Delete, Print, and change attributes of files before you make your final selection.

New Features

The first new feature that becomes obvious is the row of file extensions on the "Directory:" line as shown in Figure 1. Point to any one of these and the list in your directory window will be restricted to the type shown. No sense worrying about files that are irrelevant. Some programs, *Degas Elite*, for example, preselect automatically. Click on the asterisk to get back to all files.

The "Find" function, activated by the "F" button next to the "OK" button, scans the selected directory tree until it finds a file that matches the one on the "Selection:" line. This is a dynamite time saver. The

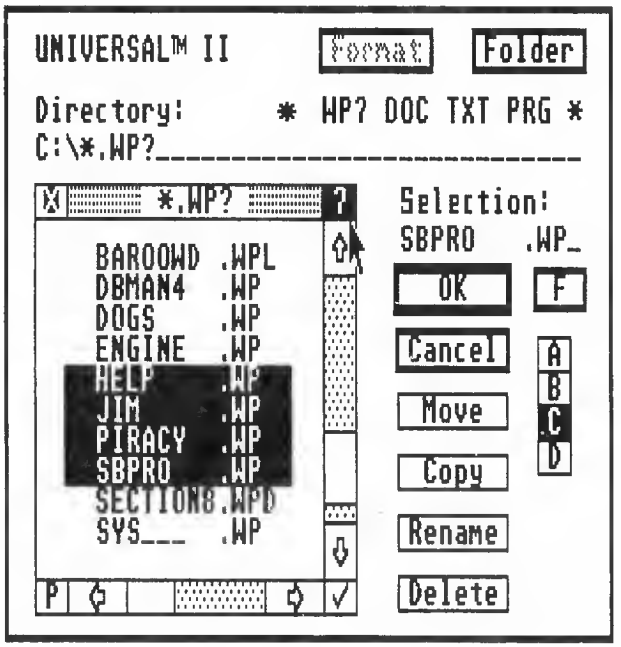


Figure 1

"P" button in the lower left corner of the file window now allows you to print out a file if you need to while you are in the midst of something else.

The Status button (the "?" at the upper right of the file window) can give a readout on a drive, a folder, a single file, or a group of files. In the drive mode you get a count of folders, files and bytes used. System free memory is also shown. If the disk in the drive you are looking at does not have a volume ID you can add one, although this does not always work. I have also experienced problems changing volume ID's with other programs that are supposed to specialize in this.

In the folder mode, reached by dragging a folder name to the "?" button, you get a count of files, folders, and bytes in the path you have selected.

Figure 2 shows how the file attributes can be changed while viewing the status of an individual file. You can "Touch" the file in this mode, thereby setting its date–time stamp to the current system value. This is very handy when using programs, such as *PHA–SAR*, that modify files without changing their time stamp. I used to use the TOUCH utility supplied with the *Micro–C Shell* for this.

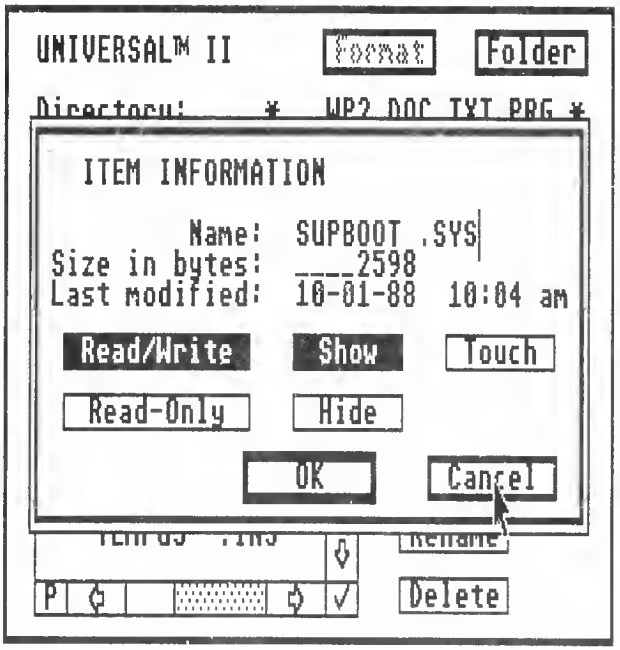


Figure II

The button denoted by a check mark on the lower right corner of the directory window now deals with other file attributes in addition to the read/write protection.

Group Operations

The ability to group files for the various functions (except Print and Rename) is really important. This can be done by the familiar shift/click or the "rubber band" methods that can be used in desktop directory windows. You can wrap your rubber band around groups of files outside the small window by holding down the shift key while moving the vertical slider and adding more rubber bands.

The status operation on groups of files or folders shows the cumulative total of items in the group. Figure 3 shows the result when this operation is performed on the group of items selected in Figure 1.

Groups of files can be renamed through adroit use of wildcards. This is not quite as flexible as it could be, but it is an adequate compromise.

Attribute changes on groups of files can be performed by dragging the group to the check mark.

Renaming Folders

Universal Item Selector II renames folders by creating a new folder, then moving the contents of the original folder into the new folder, and, finally, deleting the old folder. This can be very time consuming and it becomes plain impossible when the disk does not have enough space for both sets of files. The A & D people ought to be able to fix this one little flaw when the new TOS becomes available. The new TOS simply renames folders without changing their creation date.

Changing Your Options

The list of selectable file types can be changed using a simple configuration program, whose menu box is illustrated in Figure 4. Those select individuals who like to obscure the ancestry of their files when they move or copy them can now select that as an option by selecting NEW in the copy date section of the configuration program. I see no reason for changing the creation date of a file that has not been changed in any other way.

Conclusion

I cannot be sure that this summary of new features is exhaustive because I keep finding new little wrinkles when using this small but powerful tool. The flip side of this upgrade is a modest increase in memory use and an increase in price. Owners of the old product will have to shell out for an upgrade, but the product is so cheap that I just bought a new copy. *Universal Item Selector II* is a great stocking stuffer for Christmas giving.

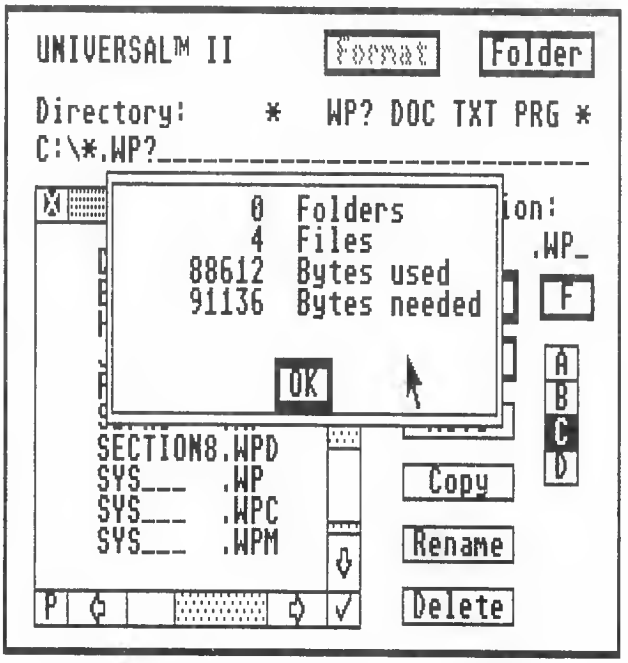
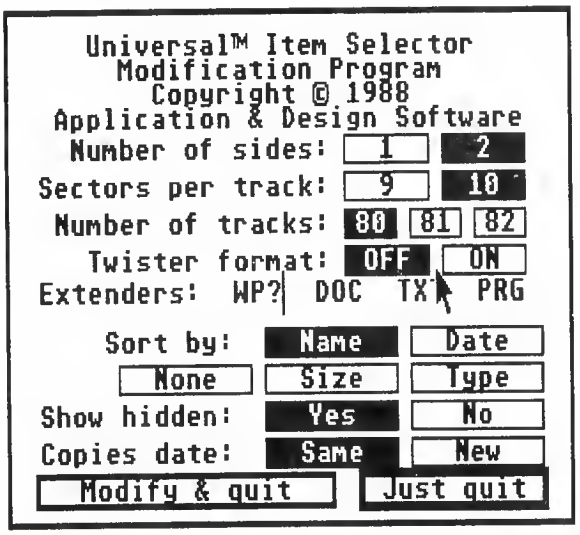


Figure III



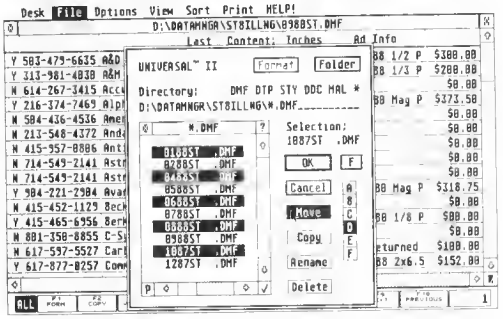
I am more convinced than ever that software developers who have written their own kinky file selectors should set them aside and let the new boy in town show them how it is done. *Deskcart*, *STTALK*, *Superbase*, and *Tempus* are examples. Kudos to the A & D people for providing a truly worthwhile product and for having the courage to make it even better.

[Universal Item Selector II: Applications and Design Software, 226 NW F St, Grant's Pass, OR 97526. $19.95]

UNIVERSAL II

Ver. 2.01 Universal Item Selector

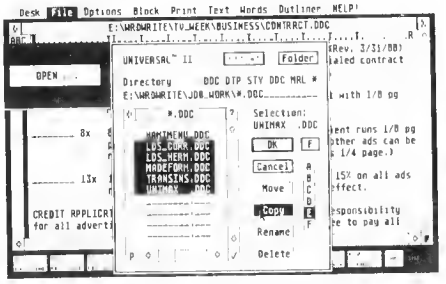
BEST file program available. Complete file manipulation is possible without use of the desktop. Use from within operating programs. With Wildcard features, Group operations are greatly simplified.



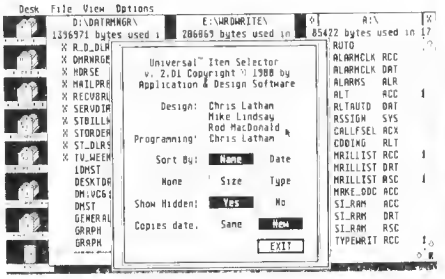
Shift/Click group operations are easy. Just hold down the shift key and select your files for any operation. You can also move up the folder tree by just clicking up the directory line. No more clicking out of each folder to go higher. Just select the superior folder and click on its name; it's that simple.

- Includes Vertical Drive Selector
- Moves / copies / deletes / renames
- Uses Wildcards on all files
- Prints directories and files
- Group operation file status
- Hide and Unhide single and groups of files
- Lock and Unlock single and groups of files
- Find a file on any drive
- Only uses 24K of RAM (plus 7K copy buffer)
- Programmable Default Features
- Remembers last path name used
- Never compromise your style again, it does it all

FREE RAM disk and print spooler included FREE with each Universal Item Selector purchased.



Rubberband group operations are possible with all "Action Buttons" featured on Universal. With verticle drive bar and path memory, you no longer have to type in drive path changes.



MODIFY.PRG included with Universal allows the user to set the defaults to their personal preference. Such things as Hidden files, sort type, current or original copy dating, quick extensions and much more.

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THE MANUAL MAKER

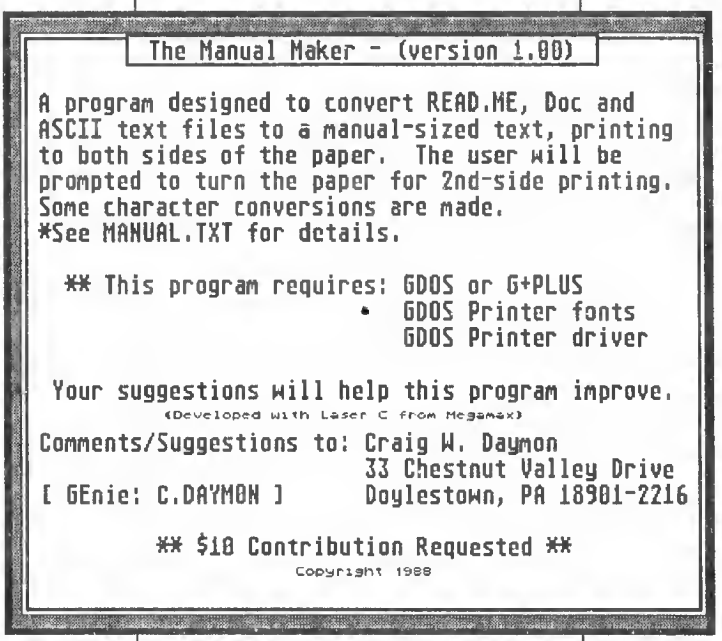
A Shareware GEM by Craig W. Daymon

Reviewed by Milt Creighton

Most of the software reviews you find in computer magazines are of commercial products and *Current Notes* is no exception. There is a very good reason for this: commercial software can cost upwards of several hundred dollars and magazines have a responsibility to their readers to suggest which packages are a good value and which ones to avoid. As a result, public domain and the less well-known shareware programs get short shrift (at least in the magazines) since they are available for little or no cash outlay. That does not mean that the PD and shareware authors are not valued or their programs not used by many of us on a regular basis; in fact, I have found the opposite to be true.

[CN does not have a policy against publishing reviews of PD software. In fact, we have published reviews of 8-bit PD programs and have encouraged ST owners to review ST PD programs. Indeed, with our large PD library, CN would love to publish more reviews of good PD programs. Just pick your favorite program, review it, and send it in! – JW]

Every now and then a public domain or shareware program appears that is absolutely indispensible of just plain fun and, when that happens, the magazines should tell you about it. For those of you who are avid telecomputer users and regularly rake through the data libraries on boards such as GEnie and Compuserve, this review will probably come as no surprise. But for others who do not make use of their ST serial ports except as dust collectors and have no means of deciphering the cryptic notes in magazine and user group public domain libraries, perhaps this review may make you aware of a nifty program with a lot of utility. Will it be a good one for you? That you'll have to decide for yourself.

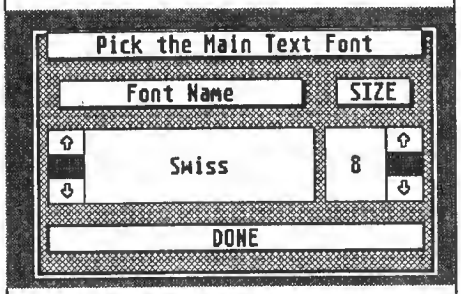


By and large, most commercial programs come with manuals. Some are typeset and handsomely bound while others are only a few pieces of paper stapled together. Manuals vary in size and shape, but one of the more popular sizes is 5.5" wide by 8.5" high. Problems soon arise because many commercial programs that offer subsequent upgrades (to correct bugs or expand the features of the original) will place a text file (often called READ_ME.DOC) covering the changes on the disk. If you print out the file on your printer, the chances are that it will not match the page size of your original manual.

In addition, many public domain and shareware manuals are placed on disk as text files and must be printed before they can be employed to help you learn the program. When you print these text files, you'll end up printing on one side of an 8" x 10.5" sheet of paper. If you collect programs the way I do, you'll soon run out of convenient storage for the paper. I am forever stuffing loose papers in my desk drawer and then dumping the contents a month later when I can no longer remember what they are for. It's inefficient and expensive and I think *The Manual Maker* may be just what I need to straighten out the mess.

Manual Maker is designed to take ascii text files from disk and print them on both sides of the paper on manual-sized pages which can then be stapled together or hole-punched and placed in a notebook. The features of *Manual Maker* include selectable font sizes, embedded commands for centering, underlining, and bold-facing lines of text, left and full-justified text, and even the printing of a cover sheet using multiple fonts and font sizes.

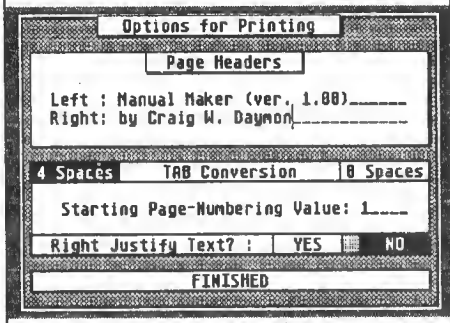
After clicking on the opening screen you will be presented with a dialog box which permits the selection of the font and font-size to be used in the main body of text.



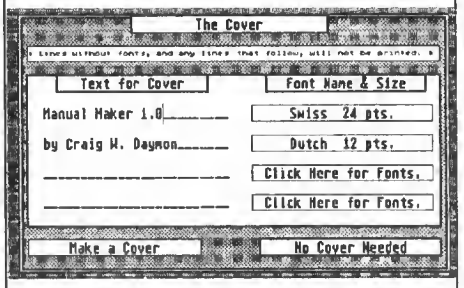
After selecting a font, click on "done" and another dialog box appears which permits page alignment and configuration.

The page alignment feature is used to ensure the page is centered on the paper so that when the page is folded, the fold-line runs down the center of the page. A printer alignment test is included to confirm the proper selections. This screen also permits setting the overall page size and margins so you have some control over how the product will look. This is a major change from earlier versions of the program. It is also possible to load and save different configurations. The manual configuration is provided with the program. Make certain you load a configuration or you may have trouble getting your printer to print. There is an apparent bug in the most recent version of the program (1.0) which prevents printing unless a configuration has been loaded.

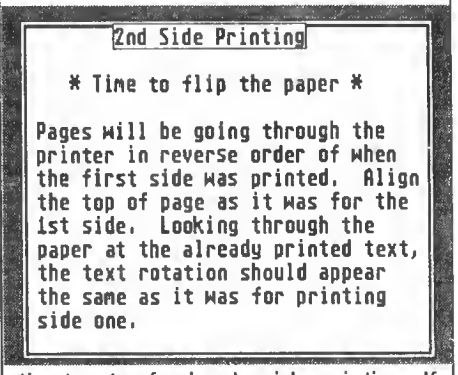
After settling on a configuration click on the "All set to continue..." button and you will be taken to the Options screen. The Options box permits insertion of left and right page headers. They can be identical or different, but they will not override headers embedded in the text file. It also converts tabs to your choice of four or eight spaces, sets the page numbering to begin at whatever number you desire and allows you to select full or left-justified text in the main body of the manual.



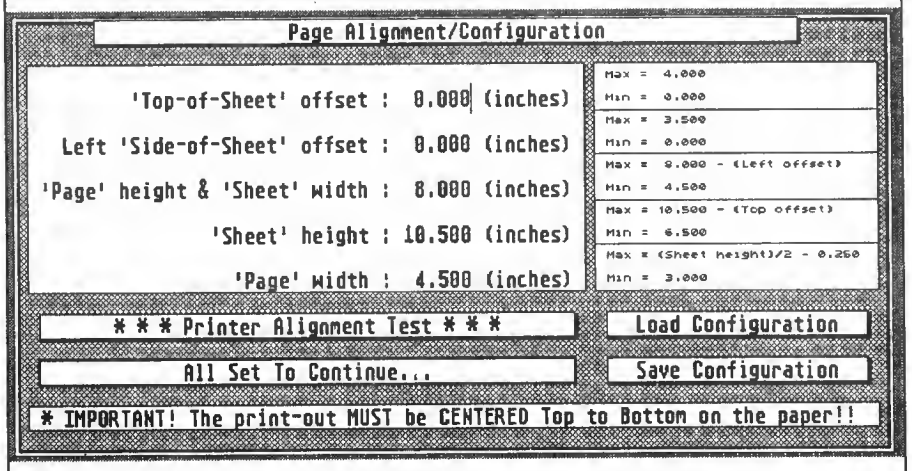
Clicking on "FINISHED" takes you to The Cover screen which permits the design of a cover for your manual (if you want one) using variable-sized fonts for up to four lines of text. Clicking on either of the buttons at the bottom will start the printing operation. *Manual Maker* will then print the pages with each page occupying half of an 8" x 10.5" sheet of paper. For example, the left side of the sheet might have page 2 and the right side page 7.



When the printing is completed on one side, you will see a dialog box which instructs you to turn the pages over for printing on the reverse side. Ensure that the pages will enter the printer in the reverse order that they entered for the front-side printing. Also, if you have a printer with a tractor feed, make certain you leave a blank sheet at the conclusion of front-side printing for threading through the tractor for back-side printing. If you have an Atari laser printer, the sheets go in face up (in reverse order) with the top of the page to the right of the drawer for back-side printing. Once you've satisfied yourself that you're ready to resume, click on the box and the second side will be printed.

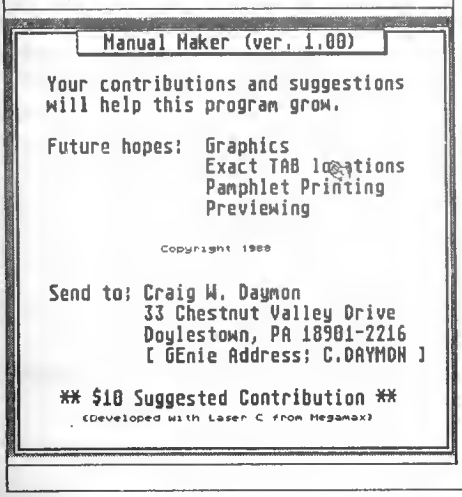


There are a couple of things to keep in mind when using this program. First, you cannot use it with a formatted word processing file. It must be saved as an ascii file first. Second, if you wish to use



the embedded command feature to obtain the available type-styles, you will have to insert them yourself with a word processor or text editor and then save the file again as an ascii file. The embedded commands operate over an entire line of text so you may not underline or bold-face a single word within a line of text. You may, however, combine several attributes for an entire line. An entire line may be centered, underlined, and bold-faced, for example. Embedded commands begin with an ampersand (the flag) and are followed by a capital letter identifier. Therefore, they will not be stripped out along with the control codes when you save an ascii file from a word processor. Keep in mind what the ampersand does in *Manual Maker* and avoid using it elsewhere in the text file or you may get some unexpected results. In addition to the embedded commands already identified, it is possible to set the left and right-page headers from within the file and to set a forced page-break.

Manual printing is just one of the uses for *Manual Maker*. You can also use it to print your own booklets (or books for that matter since it can handle documents up to 1,000 pages). It might be neat to send a friend a letter in book form, for example. Since the size of the page is variable along with the margins, there are many other unexplored uses for *Manual Maker*.



Craig Daymon (33 Chestnut Valley Drive, Doylestown, PA 18901) has plans to expand *Manual Maker* in the future. In particular, he intends to add the ability to insert half-page sized graphics (IMG format), multiple fonts, a preview of the printed page(s), and exact TAB locations. Whether he does or not will depend largely on you.

Shareware authors depend on contributions to gauge the popularity and worth of their product. If you obtain a shareware product and find yourself using it, send the author a contribution. It encourages him to improve his product. Most of them ask for only a modest sum and Craig would be quite pleased with $10 if you like and use *Manual Maker*. I think it's a bargain at twice or three times that! My check went out to him this morning.

On the downside (for some of you), the system employs GDOS fonts and printer drivers (which must be acquired separately). For those of you who know what that means, no further explanation is necessary. For those of you who are GDOS-ignorant, no further explanation will suffice. However, if you haven't yet wrestled the dreaded GDOS-monster to the ground be aware that the set-up is not a simple matter and, while the results can be extraordinary (depending on the quality of the graphics output of your printer), they can also be very slow.

Still, there are a number of GDOS-based programs on the market now including *Microsoft Write, WordUp, Easy Draw, Fontz!,* and *Timeworks Publisher*. In addition, the GDOS-replacement program G+Plus makes the set-up considerably easier. So, if you already have one of the above programs and know how to write an ASSIGN.SYS file or have *G+Plus* to steal the ASSIGN.SYS from another application, *Manual Maker* may be a useful and welcome addition to your software library.

The bottom line: *Manual Maker* is not an indispensible program, but it is one of the niftiest ideas I have seen lately. If a commercial software house had gotten the idea first (or bought it from the author) you would have had to pay upwards of $30 for it--and be happy to do so. The fact that it resides in the *Current Notes* public domain and shareware library (CN#281)--I have also seen it on GEnie [file #8156] and it's probably on Compuserve too--is a stroke of good fortune for the rest of us. Thanks, Craig!

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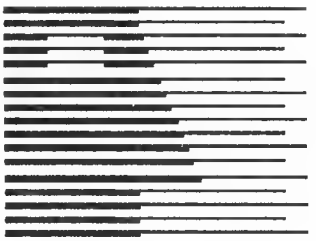
STARTING BLOCK

By Richard A. Gunter



Hooking Up the Mega

I may be one of the last of the 8–bit "Old Guard" to finally give in and upgrade to an ST system. This makes me a novice user of the ST, even though I'm an 8–bit Atari user and mainframe programmer of mumbledy–mumble years' experience. I quickly discovered that there were a lot of little details that weren't in the owners' manuals, and that no one had warned me about––because I hadn't known enough to ask, of course. I'd like to share a few of these items and some personal guidelines worked out through (sometimes) bitter experience. I sense we all need something to push against to get started, something to help us be up and running.

When you've returned from the mouth–watering foray to the computer store, it's a tempting idea to just hook everything up right away and take off. Don't do it. Even if you're a veteran, it's best to proceed in manageable steps. Get the computer working first, then attack the printer, hard drive, etc.

Read the Manuals

Unpack each item. Check to make sure that all the cables and power cords are present and accounted for. Manual in hand, check the location and orientation of all connectors; they'll be harder to see as you set up the system components on your desk. Come to think of it, this is a good time to clean off that desk.

About manuals and unpacking instructions. Even if these documents seem to be written for third–graders, take the time to read them. (Why are those unpacking instructions always someplace peculiar? Like in a manual that you don't find until after the box is empty)?

Before plugging anything in, make sure that all power switches are in the "off" position. Sometimes equipment is left powered on when it's packed. Sure enough, my monitor came out of the box switched on. It's also a good idea to make sure that your power strip is switched off and unplugged before connecting anything. (Ok, so I'm a bit paranoid about these things. Better safe than sorry).

The users' manual for my Mega contained clear and well–illustrated instructions, so all you really need to do is follow the directions. Just don't force anything ––those pins are not hardened steel.

While you're connecting the electric rodent, notice the joystick (Port 1) connector. Like the mouse connector, it's underneath the keyboard, and there's a recessed track for the cord, but the plastic retaining tabs make for a tight fit in both cases. If you have room at your desk for a stray joystick, go ahead and connect it; it's less hassle than flipping the keyboard over later.

Try to keep data cables away from power cords, and if cables have to cross, keep them at something near right angles to each other. Otherwise, let 'em hang. **Don't coil them up to save space.** A coiled wire is an electromagnet, and can cause interference. Is all this necessary? I dunno, but I've never had any kind of interference problem with either 8–bit systems or the ST.

Does it work?

With the monitor and keyboard connected, and both plugged in, it's time to make sure that the computer works. Plug in the power strip, and turn on the monitor. (There's a ritual in powering up or down with this machine; we'll expand on that later). You'll need something to load, and the Atari Language disk supplied with the computer is as good as anything. Make sure that the disk is write–protected. Slide the little black tab on the disk so that you can see through it, making sure that the tab has moved all the way to the end of its track. (I'm paranoid, ok)? Insert the disk, and turn on the computer. Hooray! It works! The drive chatters, and the soon–to–be familiar desktop appears.

Your very next step should be to back up the language disk. This also helps to confirm that the machine is working properly. The manual contains very clear instructions for copying the disk. Put the original language disk away. Next, format a second blank floppy disk for use as your first boot disk. Following the manual, save the desktop on it. The reason I'm not giving step–by–step instructions for this is that Atari did

a pretty good job of providing basic instructions for these things, and the desktop/mouse user interface really is as easy as it's been advertised to be.

Small aside: virtually all users' manuals (and my twenty years of snafus) say that you should back up original disks. You'll get tired of this admonition, but **DO IT!** I don't care how careful you think you are; anyone can make a silly mistake and wipe out a disk. It's embarrassing and time–wasting at best, and at worst I don't want to think about it. Murphy **really was** an optimist.

Rituals of Power

What about that power up ritual? Well, I've been told by hardware techies that the ST circuits are not all that well protected against zaps from the outside. This includes powering up peripherals and even touching the pins of an unused connector with a fingertip. Now I'm not enough of an electronics technician to open the box and trace circuits or to read a schematic to be sure, but I'm willing to take their word for it. I **don't** want to fry an expensive item like my new computer to find out.

For a 1040 or Mega without a hard drive, first turn on the monitor, then the computer. Insert your boot disk before turning on the computer; the built–in floppy drive doesn't have a separate power switch. Go through the ritual in reverse to power down (remove the floppy, then turn off the computer, then the monitor.) You should wait until the "busy" light on the floppy drive goes out before turning off the computer; however, some programs, particularly public domain utilities, sometimes don't turn off the busy light––even when you're supposed to swap disks. You'll have to learn (and take a chance on) which ones handle the floppy drive gracefully.

Laser Zaps

There is definitely a power problem with the Atari SLM804 Laser printer. The problem has been noted in these pages and others, but I went not–so–quietly nuts figuring it out on my own, so here we go again.

Normally, the hard disk drive connects to the computer's DMA (labelled "hard disk") port. If you have the Laser, its controller connects to the DMA port, and the hard disk drive connects to a port on the controller. You can leave the hard drive turned off (for games, f'r instance), but you **must** power up the SLM804 in order to use the system at all! The penalty for failing to do this is scrambled data on your floppy disk. I tried it, and things seemed to work fine for a while. Trying to format or write to a floppy was disastrous. Lost my *Dungeon Master* save disk that way. Fortunately, I had a duplicate (ahem)! I also damaged another disk that I was only reading.

This restriction has to be the product of dumb design, and it is a nuisance, especially since the Laser draws about 400 watts just idling. Maybe the engineer owns stock in electric utilities...

Take your time

Getting acquainted with your new ST shouldn't be a painful experience. Be patient. As you learn more about your system and add hardware and software to it, try to stick with the practice of making one small change at a time.

If you're a member of a users' group, or have friends with STs, you'll get generous and well–meant offers of public domain software, shareware, picture files, etc. Keep it simple. You'll minimize your frustrations and maximize your fun.

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HACK AND SLASH HEAVEN

"Hack and slash" has become a negative phrase for describing fantasy games with too much emphasis on combat and too little attention paid to plot. Despite the call of critics for more character interaction in computer role–playing games, the industry continues to produce combat–intensive campaigns, and, as a by–product, battle–weary gamers. The tactical combat of *Wizard's Crown* was, perhaps, a fantasy wargame wrapped in a diaphanous plot. Maybe an honest approach is needed to sate the atavistic barbarian in us all: a fantasy game whose sole purpose is to recreate the arena of combat. Enter two worthy competitors for your ST gaming dollars: Omnitrend's *Paladin,* and Strategic Simulation's *Wargame Construction Set.* Fans of *Breach* may recognize *Paladin* to be the fantasy analog of that game. Roger Damon's *Wargame Construction Set,* as enhanced for the ST by Robert Calfee, handles fantasy battles better than you might expect, despite the generic nature its name implies. In both games, "hack and slash" is raison d'etre.

Have Sword, Will Travel: Wire Paladin

Paladin is a squad–level combat game using party members and monsters a bit larger than *Ultima IV* and *Questron II.* Graphically it surpasses even *Questron II,* in that the monsters are not blurry and their attacks are more smoothly animated. There are ten scenarios in the game, loosely referred to as quests, more available on bulletin boards, and many to come from the Quest Builder program included in the package. The worlds created in these quests can be outdoor environs with many different kinds of terrain, indoor settings such as castles with up to five levels, or a combination of both. Unlike a wargame, you cannot scroll through a scenario and assess the terrain. This can only be done through party movement, which heightens a good scenario's suspense. There is a lot of clever scenery in the indoor venues, and the graphics are the best any kind of fantasy game has featured on a scale this small. Unfortunately, the party members are all represented by the same icon, whether they are swordsman, ranger, thief, mage, or paladin. Monsters have distinct icons, of course, but they are too few in number: fighter, dragon, troll, zombie, sorcerer, and spirit. (Maybe designer Thomas Carbone should've played *Bard's Tale III* , which boasts 500 monsters.) This is, of course, analogous to *Breach,* and surely made the combat algorithm a cinch to "import."

A quest usually involves reaching a heavily defended area, recovering a scroll or prisoner, and returning to an exit point with your paladin still alive. Along the way you may find objects that will aid the party in the quest: crossbows, potions, explosive objects, and magical equipment. Combat has some nice touches, both visual and aural. Fireballs hurl across a room like little cosmos of swirling flame. Swords sound upon an opponent's armor with a digitized clang. That chilling death scream from *Dungeonmaster* cries out whenever a character dies. Explosions could be better, though; those expanding ellipses prevalent in early PD games for the ST somehow slipped into this game. It would've been better to borrow Harry Laffnear's routine from *Time Bandits.* Other quest features are teleportation pentagrams, stun squares, invisibility for spell–casters, and non–combat characters that will impart brief tactical clues.

A Concept That Doesn't Seem to Work

The principal goal of the game, to improve the three statistical attributes of your paladin, is a concept that just didn't work for this writer. The paladin is the only character that is carried over to each quest. If he kills adversaries, detects open doors (with a wand), and "sees" overhead views with the Ring of Farsight (like *Ultima's* gems) during a successful quest, his probability stat for each of these actions will be increased a few points. After many quests, knighthood status will be achieved, the equivalent of *Breach's* Star level. The problem with this goal is that it makes for some contrived maneuvering of the paladin during combat: moving him in to make a kill after his comrades have weakened a monster, having other party members lug equipment around (an encumbrance penalty)

for him, and avoiding risky maneuvers for your precious protagonist. At advanced paladin levels, these drawbacks actually reverse themselves, but they exist through most of his development. Further, your paladin is not a spell-caster, which reduces his depth. Only rangers and magi can cast some or all of the game's six spells: fireball, mind stun, detect (secret) door, confuse, speed, and invisibility. Although paladins are not generally spell-casters, this game is not so steeped in D&D tradition that a limited exception could not have been made. When you name your beginning paladin, a good choice might be Prince Priss the Shallow.

Tactically Interesting

The Quest Builder program is very easy to use, requiring only four pages of the game's thirty-five page manual. Two nice features are 'fill screen' and 'fill map' (with a designated terrain square). The variables for party and monster attributes are limited, and you can not change the color of terrain or monsters, but there are enough terrain, interior, and scenery squares to make some pretty and tactically interesting 50x50 square maps. On one occasion, the full view feature caused the program to lock up on this writer, and others have reported the same bug as well. There are two text features that help to personalize your quest. A brief paragraph can be written,setting the storyline, which can be clicked on and called up by the player. One-line messages can also be placed on certain terrain squares and "scenery" (non-combat, fixed) characters that can provide cryptic clues, pertinent puns, or anything you might choose. Quests can also be chained together to make a mega-quest. *Breach* scenarios are plentiful on many bulletin boards; since *Paladin* does everything its predecessor does and more, quests should already be filling up the game files everywhere. There's even a paladin editor available on GEnie (PALEDIT.ARC) written by Anthony Farmer, who programmed the ST version of *Stocks and Bonds,* and was a member of *Current Notes'* CRPG ratings panel in September.

WCS: Dungeons and Dragons?

Forget about Evan Brooks's review of the eight-bit *Wargame Construction Set* version in the October 1987 issue of *Current Notes*. Robert Calfee has addressed Evan's comment that "Ancient efforts are beyond the ken of (the game's) design..." by greatly enhancing the graphics and variety of icons the ST version offers. Paladin's interior and character graphics are better, but *WCS* party icons can be swordsmen, bowmen, and crossbow users; if you don't mind symbolic icons, there are some very realistic sword, shield, and crossbow representations. Several icons depicting medieval war machines (catapults, mantlets, siege towers) are used in the game's only antebellum scenario, "Castle Siege," a sort of tactical-operational *Defender of the Crown*. Ships can also be used, either as war vessels, or to transport the party over water. On the negative side, there are no real monster icons, save for a skull figure, but most of the aforementioned icons are available in different colors, so they can be used as adversaries, too. Sounds were developed with Antic's *G.I.S.T.* program, but most are only appropriate for mechanized warfare.

Since *WCS* only includes two scenarios of interest to fantasy gamers (Castle Siege and Beta 4, a sci-fi scenario), its potential for the genre lies in the construction program. Both it and the game program load completely into memory. Switching between the two is as simple as three mouse clicks, allowing facile play-testing of a game-in-creation. Like *Paladin, WCS* offers many graphic tiles which are used to fill a 60x58-tile playing field (in the zoom tactical scale). The graphics were drawn with *Athena II* ; while not the equal of *Paladin's* art, they are still good. But what makes it possible to speak of both programs in the same fantasy review is the power of *WCS* . You can easily modify the colors of any graphic tile, and alter the twelve different statistics for each unit. These factors make creations with *WCS* more tactically interesting and more graphically individualized than the scenarios wrought from *Paladin's* Quest Builder. WCS also allows for creativity in ways that the designer never anticipated. For instance, by using the crossroads tile and adjusting its two colors, castle floors can be drawn that look somewhat like those in *Gauntlet*. Reversing land and sea tiles and adjusting the colors can result in a map that looks eerily like *Ultima*. (Some tricky unit reclassifications are required.) This writer took to heart Roger Damon's battle cry in the documentation for creativity: "Take control and do what I have been doing...and do it better."

Battles Royal to Come

It should be clear that this writer found creating with *WCS* immensely enjoyable. But it needs to be made even more clear to the prospective buyer that it is *Paladin* , not *Wargame Construction Set* , that is generating enthusiasm among ST gamers. Further, *WCS* is not a direct application to fantasy combat, and some gamers may not be satisfied at all with the extent that it is. Both games are worthwhile, especially to those who liked the detailed combat of *Wizard's Crown* and *Roadwar 2000* . An icon editor and, perhaps, a user-defined

fill pattern for both packages would've increased creative potential greatly. Expect a wave of *Paladin* quest uploads--and if this would-be game designer can fine-tune his efforts, a few good *WCS* scenarios, too.

Misty Writings--The full-featured fantasy construction program I mentioned in last month's column, *Adventure Con-struk-tor*, has been vaporized, but will hopefully not become zombieware. Alan Reeve is devoting all of his time to an integrated DTP and paint program he calls *Diamond*, and so the fantasy game is on hold....If you're yearning for an ST version of *Ultima V*, it may cool your jets somewhat to know that quite a few Apple and IBM users feel it is not as good as *Ultima IV*, despite all the new features....Computer Gaming World's Adventure Game of the Year is *Wasteland*. Since it comes from Electronic Arts, guess which sixteen-bit computer has a version in the works....

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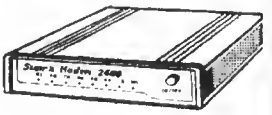

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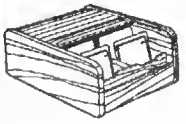

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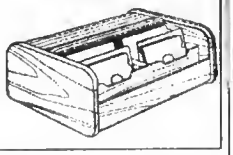

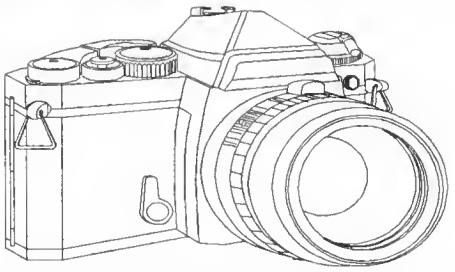

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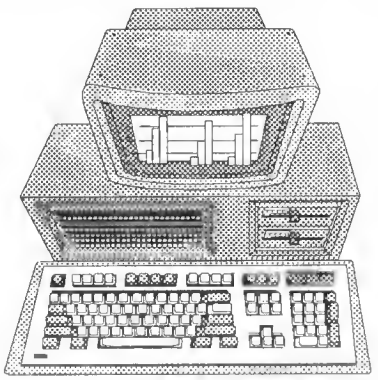

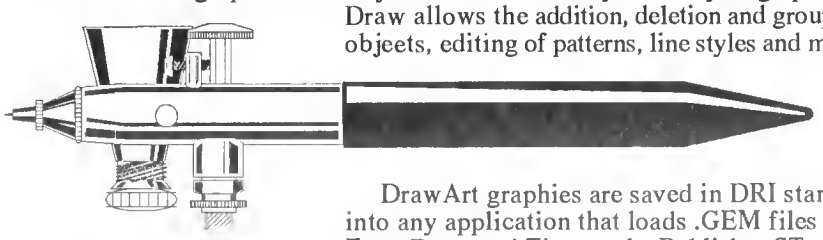

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By Joe Lambert

This month I'd like to discuss some of my favorite "Graphic & Art" software and hardware.

All of the following, programs and hardware are not a requirement to create and collect great graphics, but they are certainly a big help in saving time and frustration.

First, let's look at the reasons users want computer graphics. Different people desire computer graphics for different reasons. A few of the reasons are:

Use in **Desk Top Publishing,** this application requires computer graphics for illustrations. Since most DTP programs are made in such a way that the finished product is sent to a printer, color is not a requirement. The color is added by running the printed pages past other plates on the printing press using different colors. Illustrations are "cut and pasted," shrunk and stretched into text pages. The best type of graphics for DTP are high resolution GEM or IMG types. They scale much better than other types of graphics.

Animation is the next area we'll look at. Animation, whether created through programming with programming languages like "C," assembler or basic, or using a specialized animation program like *CAD 3D/Cybermate* or *Aegis Animator* can all use pictures created by draw/paint programs as background for animation sequences or pieces of these pictures can be "cut and pasted" to be used as sprites or players. For these graphics, unlike DTP graphics, users many times want to use color for more visually exciting effects. The more colors, the more exciting. This means 16 color low resolution. There are several draw/paint programs available, some even have their own animation modes built in.

Slide Shows are another use for graphics. How many of us have shown slide shows to friends and relatives to demonstrate the fantastic graphic capabilites of our STs (and why they really don't need RGB/EGA/VGA and any others). I enjoy creating my own screens and looking at the work of others. Collecting computer generated art is just like collecting other forms of art only it takes up a lot less room.

So there are some of the reason why you might want it. Here are some of the ways can get it.

There are several DTP programs on the market that include drawing tools to create GEM and IMG type of graphics; since I am weak in this area of ST graphics, I'll refrain from passing judgement on any of these programs.

For an all around draw/paint program I prefer *Degas Elite*. *Degas Elite* is an enhanced version of *Degas*. *Degas Elite* allows much more block manipulation than *Degas*. *Degas Elite* also has a compressed file mode that saves a lot of disk space. This program has always done what I've wanted it to with a few exceptions.

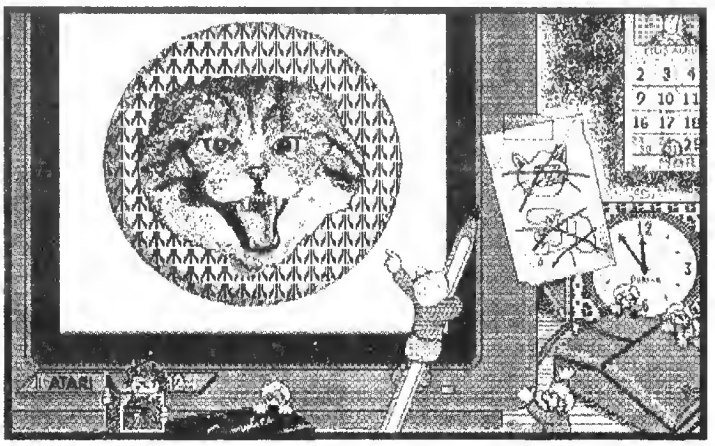
If you need more colors you have to have *Spectrum 512*. Although it does have many more colors it isn't as easy to use as *Degas Elite*. I like to create on Degas Elite and then transfer them to *Spectrum 512* and alter them with more colors.

One of the most useful tools available for ST graphic pictures is *PicSwitch*. This is an excellent program. By far it is the finest shareware product I've ever used. This program does so many things it would take many more pages to fully explain them all. It isn't a drawing program, but It can do many things that all of the drawing programs can't do. The most useful thing it does for me is to convert picture files of one type to a file of a different type. It converts Mac, Tny, Neo, Iff, etc into Neo, PI1–3 or PC1–3. It also dumps your picture to your printer, and functions as a great viewer.

That's all I have this time. Next month I'll continue with more favorite graphics "stuff," including IMG SCAN with the new software that can produce IMG type files.

Also check out this month's disk listed in the PD section.

Remember, send in those new picture files for trade and benefit yourself and the other *Current Notes* readers with some new pictures for their desktop publishing programs, animation applications or just their slide shows. Send to: Joe Lambert, 1116 Woodlawn Ct., Pekin Il. 61554. You'll get file for file some of my nicer pics in trade and a list of my available files for future trades.



IS PIRACY THE CAUSE OF OUR WOES?

Put Your Shoulder to the Wheel

By John Barnes

Intellectual Property

At the recent AtariFest Jayne White of the Software Publishers' Association gave a presentation on software piracy that received a lively, if unfocussed, response from the audience. Jayne tried to convince us that handing around copies of copyrighted software is a crime. The crime is theft, stealing the intellectual property of others.

In this talk and in other pronouncements the software publishers seem to lay much of the blame for their lack of success at the feet of "pirates."

Needless to say, a society that condones crimes like dealing in cocaine, owning (and using) radar detectors, and blowing away people with handguns, is not going to take copying a few disks seriously. The software publishers are upset because the cops seem to give a big yawn when asked to bust a 10 year old, to put his dad in the slammer, and to confiscate the family manse, all for the sake of a $15, $50, or $200 program.

A Cottage Industry

We hear tales of cases where this is being done, but piracy is such a widely dispersed cottage industry that stamping it out is like fighting forest fires when there is no rain. The computer press is full of pious sermons calling for moral rectitude. I would like to take another, perhaps more realistic, tack.

If the cops won't take time out from slugging it out with dope dealers to shut down Captain Kid's BBS, the developers must take matters into their own hands. In short, they must sue. No one else is going to do their laundry for them. If they have trouble convincing a court of law that they have been damaged by an act of piracy perhaps they should rethink the real value of their intellectual property rights and get into some other line of work, as others have before them.

> "I cannot tell you how often developers have picked my pockets."

People who choose to make a living in the Atari marketplace have chosen an area where the pickings are pretty slim. Ms. White stated that Atari software sales amounted to something like 0.3 percent in dollar volumn of all software sales, compared to Commodore's 0.7 percent and Apple's 10+ percent. Software sales per installed Atari machine are said to be low. Piracy may be part of this, but the low price of Atari software titles and the availability of good public domain software may be other additional reasons. The game image, which keeps machines out of serious work environments, is undoubtedly also a factor.

In many cases the property rights that are being so vigorously asserted are worth very little indeed. Too many products do not work, others are poorly documented, and others are simply not worth the money. I find an overall lack of professionalism and maturity in our developer community, even in some of our "name" houses.

PD Competition

I cannot tell you how often my pockets have been picked by developers. Each experience of this kind makes it easier to justify borrowing a copy of the program from a friend to see if it will work before kissing my cold cash goodbye. This too, is the American Way, friends banding together to fight off marauding Indians.

Developers should also recognize that they are competing with public domain software. Much of this material suits the needs of the Atari user at least as well as the commercial stuff does.

Some developers, notably VersaSoft and QMI, have posted demo versions of their products to help introduce them. Properly designed demo versions should be a good marketing tool (as well as a debugging tool).

Some software houses seem to think that their customers may be regarded as a corps of beta testers. This breeds nothing but ill will and the long-term costs of repairing the damage must be very high indeed.

Security is another area in which developers should work harder. Too often programmers spread their wares around indiscriminately to earn bragging rights, only to have recipients start flaming their unfinished products. Beta testers should be carefully chosen. There are too many leaks of software while it is in the beta test phase. Copies of the software can

be made distinctive, so the origins of pirated copies can be traced.

Unrealistic marketing plans are all too common. Too many products are advertised that are not even finished.

Manufacturer's Role

The editorial in the October *Current Notes* was a penetrating analysis of the problems created by the structure of Atari Corp.

Atari Corp must learn to recognize that it's relationship with software developers should be symbiotic rather than antagonistic. The most successful developers I have spoken to succeeded on their own after incredible uphill battles.

Manufacturers must provide hardware and operating systems that are capable of running high performance software. In addition the manufacturer has a responsibility to provide high quality development tools and adequate documentation. These tools must be updated and made available.

My model in this area is Digital Equipment Corporation. They take Software Performance Reports (SPR's) seriously. They are not afraid to release revisions and customers cheerfully pay for them because they find it worthwhile to do so. Their DECUS organization pays close attention to responsible users. Membership is free.

DEC evaluates third-party software and puts a stamp of approval on it. They recognize that no one will buy their machines or their operating system software if there are no applications to be run.

Atari Corp is, of course, much smaller than Digital, there is not nearly as much added value in Atari application software, and DEC's customers and developers are professionals.

Atari Corp's inability to get products into stores means that the installed hardware base is smaller than it ought to be. More dedicated work is needed on the production line and in the marketing department, particularly with regard to advertising.

The Atari press should provide consumers with objective evaluations of software products. Users who get hold of the latest strongly hyped product, only to find that the Emperor has no clothes, have a right to be turned off.

A Public Trust

The press' position in this area is a public trust. Their duty is to keep consumers from being exposed to pickpockets and to steer them toward good solutions to their problems.

Software reviewers must learn to look behind the glitz and hype to assess the real performance of the material they deal with. I have seen too many software reviews that ooh and ahh over the screens that developers provide in their canned demos while failing to discover how truly difficult the product is to use.

The Role of User Groups

User groups can support improved consumer awareness by helping their resident experts find the true strengths and weaknesses of new products. Demonstrations, classes, tutoring through the "buddy system," or assistance hotlines can be valuable tools for overcoming some of the frustration that tyros experience when they run into trouble with new software.

Showcasing high quality products is a valuable service to the user community as well as to the developers.

Public domain software that augments the commercial stuff is very important. User groups can do a lot to encourage the development and dissemination of such software.

User Groups should also act to discourage piracy. Members who pass around pirated software should suffer some measure of public approbation. User groups should assist in compiling documentation on bulletin boards that feature pirated software and help the developers take action to shut them down. Software piracy is no more "cute" than shop lifting is.

I have received a number of calls asking how to use software for which the user lacks documentation. I usually tell such callers to get hold of a piece of suitable public domain software if they cannot afford to buy the real thing.

Conclusion

The slim market for Atari software has many root causes. It is entirely too easy to overlook one's own shortcomings and to blame problems on someone else. If piracy cannot be stamped out by preaching or suing, then those developers who wish to do battle should gird up their loins and sharpen their weapons.

Those developers who choose to avoid the problem by fighting on a different battlefield may be surprised by the strength of their competitors. Companies like Microsoft, Ashton-Tate, Word Perfect, and others did not become giants without bright people, hard work, and dedication to their products.

I still believe in "Power without the Price." I have done a lot of rewarding work with my Atari machines, and I expect to keep on doing it. But I urge that we all put our shoulders to the wheel and get on with confronting the real challenges.

BLUE MAX ARCHON

Reviews by Patrick Adkins

BLUE MAX

Hand on the throttle, eyes anxiously watching your speedometer, you carefully ease your biplane away from its hangar and down the short runway. If you act too quickly, before you achieve the 100–mile–per–hour speed necessary for a successful lift off, you and your plane will skid to destruction. If you're too slow, you'll slam into the trees waiting at the end of the runway. There, you've made it! Now climb––climb quickly, to escape the anti–aircraft shells exploding all around you as you set off on a World War I fighter–bomber mission.

A river snakes ahead of you, and as you follow it, dodging enemy planes and withering ground fire, you keep your eyes peeled for your primary targets: bridges, ships, anti–aircraft batteries, anything that will weaken the enemy. All around you the sky flashes with the explosions of enemy shells; then an enemy plane swoops toward you out of nowhere and you open up on it with your machine gun. You've hit it, but your plane has sustained damage too––your fuel tank is leaking, and you must find a place to land and get repairs....

This is the situation you face when you settle down for a few hours of Blue Max, the 1982 Broderbund Software game that has recently been reissued by Atari on cartridge for the XE/XL machines.

This World War I air warfare simulation offers plenty of challenge and fun for those who like arcade games. At first it's a bit disconcerting to find a biplane equipped with retractable landing gear and functioning as though it has a WWII–vintage bomb bay, but (with the possible exception of the landing gear) such seeming anachronisms actually fall into the category of exaggeration rather than outright inaccuracy. (During the Great War, "aeroplanes" were first used for reconnaissance. The pilots began shooting at each other, and before the war ended there were indeed full–fledged bombing raids and anti–aircraft guns.) Besides, historical accuracy really has little to do with arcade games.

Blue Max features three levels of difficulty. By depressing the joystick button, you can spray gunfire at enemy planes or, during strafing runs, at ground targets; press the button while descending, and you drop a bomb. In general, once you get the knack of it (and because of an option that allows you to select normal or reverse direction joystick movements), the controls are quite easy to use.

The six–page instruction folder packaged with the cartridge is straightforward and concise, allowing you to digest it and begin playing within five minutes or so of opening the package. It's also designed so that one can refer back to it easily whenever necessary.

Blue Max was originally released by Broderbund Software nearly six years ago and does not appear to have been updated for this rerelease. Nevertheless, sound effects are good and the graphics, though no longer state of the art, are quite acceptable. A small silhouette plane (with shadow pacing it on the ground below) navigates over a map–like scrolling screen, dotted with bridges (cute little cars and trucks occasionally cross those bridges), buildings, ships in the river, and many, many trees. The larger primary targets which you must destroy to complete your mission are designated by flashing bull's–eyes; smaller ones include flashing blue planes and cars. After following the river, you eventually penetrate to an enemy city and fly between its buildings. Whenever you crash (often!) you must start again, from the beginning. Once you've successfully destroyed your final target, you still must make it to the nearest runway and land (often a harrowing experience) before you've won.

Enemy fire can be really fierce. Luckily, this version of a WWI bombing mission features an ample number of refueling and repair stations––even well behind enemy lines! As your fuel runs low––or when your craft becomes critically disabled––you must glide in and land on one of these runways, being careful to leave adequate room for your take off (lest you crash into the always–present trees at the end of the runway).

Blue Max is well constructed and very entertaining. It's quite challenging even on the novice level of difficulty, and should give you many hours of enjoyment as you try to master it. It's the sort of game you'll probably return to again and again over the years to come.

ARCHON

Archon is a very unusual game that combines the forethought of chess with the quick-reflex joystick movements required by arcade games.

"You are about to engage in the ultimate battle of the universe--the eternal struggle between Light and Darkness," the instruction booklet tells us. That struggle begins on the "strategy screen," a nine-by-nine checker board where the Forces of Light and the Forces of Darkness face each other like chess pieces. Each side features a broad assortment of "mythical and legendary creatures": wizard, unicorn, archer, golem, djinni--sixteen all told, eight per side, with no two sides possessing the same "creatures." The Light side, for instance, is led by a Wizard; the Dark Side's leader is a Sorceress. Both cast magic spells, and are equally matched.

The object of the game is to control the five flashing red "power points" on the board or to destroy all the opponent's pieces. The game can be played by two people or against the computer. As you move around the board, using the joystick to select and position your pieces, the squares will change shades. Light pieces are strongest when they occupy a light-colored square, and vice versa, so the shifting pattern of the board can be critical to your success.

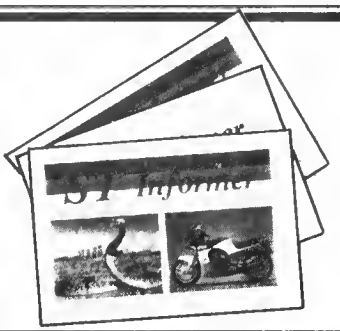
When two pieces try to occupy the same square, the square expands, becoming the "combat screen." Here the two figures become animated, controlled by joystick or computer, and battle it out with each other, using swords, clubs, flames, missiles of various sorts, and magical spells.

Archon was originally released in 1983 by Electronic Arts, and is now available from Atari on cartridge for the XE/XL systems. Even more than Blue Max, it suffers from outdated graphics. Even viewed on a large color television set, it is quite difficult to distinguish the various figures until one has played the game often enough to become completely familiar with each of them. The eight-page game manual is reasonably well prepared, but the complexity of the game makes careful attention to its details absolutely essential.

After inserting the cartridge and turning on the computer, the computer will begin a sample game; watching the various figures run through their paces can be reasonably entertaining and is an easy way to learn just how the pieces function. Options allow you to select one or two player games, to choose whether you will play for the Light or Dark side, and to select which side will go first. There is, however, no option to allow you to select the level of difficulty, and this is a significant lack; the computer plays against you at one level only--virtually unbeatable (at least for this reviewer). On the combat screen, the opposing pieces move and fire with overwhelming skill!

Archon rates an A for originality. For the game player seeking a challenge, both to his intellect and to his joystick dexterity, this game offers both. It's certainly not for everyone, but those who are fond of both chess and arcade games may well find it addictive.

Patrick H. Adkins is the author of the Ace Fantasy Special Lord of the Crooked Paths. He now writes on



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ATARI'S SMALL MIRACLES

by Joseph Russek

STAR

A series of colored lines emanating from the center of a black screen combine to make quite an impressive star. Thanks to the Eugene, Oregon, Atari Computer Enthusiasts for this small gem.

```
0 REM EUGENE ATARI COMPUTER ENTH-
1 REM USIASTS EXCHANGE LIBRARY
2 REM **** A STAR IS BORN ****
3 REM BY JON LOVELESS
4 REM C/O MATT LOVELESS
5 REM 18623 PLUMOSA ST.
6 REM FOUNTAIN VLY., CA 92708
7 POKE 77,0
10 GRAPHICS 7+16
20 FOR A=1 TO 48:COLOR A
40 SETCOLOR 4,INT(16*RND(1)),1
50 FOR X=0 TO 157:Y=INT(96*RND(1))
70 PLOT 79,49:DRAWTO X,Y:NEXT X
80 DRAWTO X,Y
100 NEXT A
```

ROLL

Slowly one-by-one four blue cylinders are formed. When they are completed, they begin to rotate, creating a cartoon-like three-dimensionality.

```
5 DEG
10 GRAPHICS 10
15 FOR I=0 TO 7:POKE 705+I,128+2:NEXT I
17 POKE 705,136
20 FOR ANG=180 TO 360+180 STEP 6
30 X=8+8*COS(ANG)
40 Y=16+8*SIN(ANG)
50 COLOR (ANG-180)/45+1:PLOT X,Y
60 DRAWTO X,50+Y
70 COLOR 0:PLOT X,Y
90 NEXT ANG
120 FOR ANG=180 TO 360+180 STEP 6
130 X=26+8*COS(ANG)
140 Y=16+8*SIN(ANG)
150 COLOR 9-(ANG-180)/45:PLOT X,Y
160 DRAWTO X,50+Y
170 COLOR 0:PLOT X,Y
190 NEXT ANG
220 FOR ANG=180 TO 360+180 STEP 6
230 X=44+8*COS(ANG)
240 Y=16+8*SIN(ANG)
250 COLOR (ANG-180)/45+1:PLOT X,Y
260 DRAWTO X,50+Y
270 COLOR 0:PLOT X,Y
290 NEXT ANG
320 FOR ANG=180 TO 360+180 STEP 6
330 X=62+8*COS(ANG)
340 Y=16+8*SIN(ANG)
350 COLOR 9-(ANG-180)/45:PLOT X,Y
360 DRAWTO X,50+Y
370 COLOR 0:PLOT X,Y
390 NEXT ANG
410 GO TO 500
420 FOR ANG=180 TO 360+180 STEP 6
430 X=50+8*COS(ANG)
440 Y=16+8*SIN(ANG)
450 COLOR (ANG-180)/45+1:PLOT X,Y
460 DRAWTO X,50+Y
470 COLOR 0:PLOT X,Y
490 NEXT ANG
500 A=PEEK(705)
510 FOR I=705 TO 711
520 POKE I,PEEK(I+1)
530 NEXT I
540 POKE 712,A
550 GO TO 500
```

RAINBOW GTIA

This GTIA demo begins with the formation of a rectangular-colored spectrum. When each bar is completed, shifting of colors takes place, and a rainbow effect is achieved.

```
100 REM GTIA TEST
115 GRAPHICS 10:FOR Z=704 TO 712:READ R:
POKE Z,R:NEXT Z
116 DATA 0,26,42,58,74,90,106,122,138,154
130 FOR X=1 TO 8:COLOR X:POKE 765,X
140 PLOT X*4+5,0:DRAWTO X*4+5,159:PLOT X
*4+1,159:POSITION X*4+1,0:XIO 18,#6,0,0,"S:"
150 NEXT X
230 FOR X=8 TO 15:COLOR 16-X:POKE 765,16-X
240 PLOT X*4+5,0:DRAWTO X*4+5,159:PLOT X
*4+1,159:POSITION X*4+1,0:XIO 18,#6,0,0,"S:"
250 NEXT X
300 COLOR 0:PLOT 65,159:DRAWTO 0,159
400 FOR X=1 TO 8:Z=PEEK(704+X):Z=Z+16:IF
Z>255 THEN Z=26
420 POKE 704+X,Z:NEXT X:FOR Y=1 TO 5:NEX
T Y:GOTO 400
```

RAINBOW

A series of blue lines enter from the top, left-hand corner of the screen. When they are formed, they begin to vibrate and change colors. Thanks to the Salt Lake Atari Computer Enthusiasts for this interesting program.

```
10 REM RAINBOW
20 REM ACE OF SALT LAKE
30 GRAPHICS 15+16:COLOR 3
40 FOR X=0 TO 159 STEP 8
50 PLOT 0,0:DRAWTO X,191
60 NEXT X
70 FOR Y=191 TO 0 STEP -8
80 PLOT 0,0:DRAWTO 159,Y
90 NEXT Y
100 FOR I=0 TO 21:READ A:POKE 1536+I,A:NEXT I
110 A=USR(1536)
120 DATA 173,11,212,201,32,208,249,141,10,212,142
,24,208,232,232,208,246,142
130 DATA 24,208,240,232
140 END
```


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*Mark Williams C	$117	PM+ Art Gallery II	$20
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BRIDGE 5.0

Review by John Godbey

Bridge 5.0 is a program for people who already know how to play bridge. It is not designed to teach you the rules or fundamentals of the game. But if you understand basic bidding and play, you can use the program to polish your skills, or just to enjoy the game when you can't find any human players.

When the program boots up there is a menu with five choices. The "Play" option randomly orders the 52 cards, and deals four hands. The "Opening Hand" option guarantees you a hand with at least 13 points; the "Save Hand" and "Load Hand" options allow you to save to disk a hand that you have just played, or to load a hand which was previously saved to disk. (Hands can be saved to any formatted disk.) The "Quit" option allows rebooting, return to DOS, or rerunning the program.

In play, your hand is always South. When Bridge 5.0 deals the hands, your hand is sorted by suit, ordered, and displayed. You then bid your hand in the normal fashion with the computer bidding the other three hands. Bidding is entered with a two-character format--e.g., "1S" would be "one spade;" "3D" would be "three diamonds," and so on. Once you have arrived at a contract, the screen displays the dummy hand, and plays both opponents' hands--and your partner's, too, unless you have the contract, in which case you play both the declarer's hand and the dummy. When the hand is over you can replay it, if you like, or save it to disk. The computer tallies up the score, and you can play another hand.

This program has several good features. It makes good use of graphics, displaying the hands as a row of spread out cards. The bidding and play are quick. It uses standard American bidding, and, according to the instructions, both Blackwood and Stayman conventions. (The Blackwood seems to be there; however in the three or four dozen hands I have played, I have not had a situation arise where the Stayman would be used so I haven't been able to test it.) The program has a very useful "auto play" feature: at any time by simply pressing RETURN, the computer will bid or play for you. Since the hands can easily be replayed, you can compare your bidding and playing to the computer's. Finally, both the bidding and play are well trapped for errors. The program never allowed me to make an illegal bid or play. It has both a "Claim" command and a "Concede" command which allow you to claim all remaining tricks, or concede them all to your opponents. This greatly speeds up play of uninteresting hands.

As the hands are played, the computer keeps score. So far as I could determine from my playing, it does this accurately.

However, the computer's play and bidding are only so-so. I am an infrequent bridge player, but I had no difficulty making hands that the computer could not make. Furthermore--although this is not as clear--I think the computer often underbids. For example, on the following hand, playing South, I bid and made four spades; using the "auto mode" feature, the computer bid three spades and went down one:

NORTH
S: Q763
H: T92
D: 532
C: A65

WEST
S: T98
H: AKJ6
D: T94
C: KQ2

EAST
S: --
H:Q743
D: A76
C: JT8743

SOUTH
S: AKJ542
H: 85
D: KQJ8
C: T

However, in judging this program the limitations of 48K must be kept in mind. Anyone who has tried to write bridge programs for the Atari knows that efficient, effective bidding and play algorithms are difficult to devise. The program is good enough to interest an average player, but would probably be boring for a serious player.

The program does have some serious limitations and flaws. Although the bidding allows doubling, it does not allow redoubling. I find this a puzzling limitation since it should not be difficult to add to the program.

The program does not load a "SAVED" hand if only one hand has been saved. When two or more hands have been saved, this feature works as advertised.

More seriously, the program does not allow you to enter hands of your choice to be played. This means that you can't, for example, take the hands from the morning newspaper's bridge column, enter them into the program, and "what if" the various plays suggested by

the text. In short, it severely limits the program's usefulness as a learning tool. Again, this does not seem to be a difficult feature to add to the program. One more menu choice could allow the program to load in a module which could write hands to a disk, and they could then be loaded with the present program.

Finally, the program occasionally crashes, filling the screen with interesting patterns of graphic symbols. After some experimentation I determined that if the "Opening Hand" option is chosen twice in succession, the program for some reason mis-sorts the cards. Then, when it tries to play the hands, it crashes. If the ordinary "Play" option is chosen once between the "Opening Hand" options, this difficulty is not encountered.

In summary, this is an interesting program, with some good features. Beginning and novice bridge players should find it useful and fun. However, the play is too basic to interest advanced players.

Artwork Software Company, 1844 Penfield Road, Penfield, New York 14526, 8-bit Atari version. Retail: $29.95

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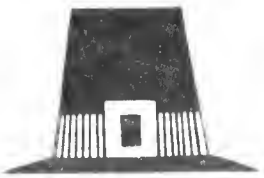

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TRAILBLAZER

Review by John Godbey

If you are looking for a new arcade style game to test your reflexes, *Trailblazer* would be an excellent choice. It is a fast, playable game for one or two players. It makes good use of the Atari sound and graphics capability. It is difficult enough so that you won't tire of it after just a few games, but simple enough in execution that you can play it without learning a lot of commands and rules.

Trailblazer resembles *Ballblazer* in more than the name. Those of you familiar with the old Lucasfilm game will feel right at home when *Trailblazer* boots up. The screen is divided horizontally into two areas; the top area is for player one, the bottom for player two. Each area consists of a checkerboard patterned road, along which you maneuver a ball. Different colored squares have different effects as your ball rolls over them--black squares are holes your ball falls into, red ones slow your ball down, yellow ones bounce your ball, green ones speed your ball up, etc. The object of the game is to maneuver your ball through the 21 different courses as quickly as possible. In a one person game you race against time; in a two player game, against your opponent.

Most Atari two-player arcade games have one player take a turn, and then the other player takes a turn--as, for example, in *Pacman*. They play against each other only in the sense that they are trying to get a higher score than their opponent. *Trailblazer* is one of the small number of arcade games which allow two people to play against each other in real time, where the actions of one player can directly and immediately affect the other.

For those not familiar with Ballblazer, the split screen does not show two different roads, but one road from two different points of view. At the start of a two-player game each player can see his own ball and his opponent's ball in his half of the screen. If one player moves along the road faster than the other, then the second player can "see" the first player moving away from him in his view. The two players' balls can hit each other, and players can try to maneuver in front of the other player to gain an advantage.

This sounds complicated, but in practice it is straightforward and easy to operate. In just a few minutes of play you will master the controls and get used to the split screen view of the road.

In addition to the standard one- and two-player arcade options, *Trailblazer* has a one-player trial option, in which you can pick any of the courses and play for 99 seconds, and a two-player match option in which the two players pick out any three courses they wish, and race against each other on them.

I think in graphics and playability *Trailblazer* exceeds *Ballblazer*. In both the one- and two-player games you have excellent control over your ball with the joystick, and you can clearly tell from the screen how you are doing. Left and right on the joystick move your ball left and right, and forward and back increase and decrease your speed. A push of the button enables you to jump over holes in the road (The balls can also be controlled from the keyboard).

I have only one real complaint about this game: when a game is over, your score stays on the screen for only two seconds--so unless you set a new high score, it is difficult to see just how well--or badly--you did. The score should stay displayed until the next game is started.

Trailblazer comes on an Atari/Commodore flippy disk--if your local Atari store doesn't have it, try a Commodore dealer. The Atari version works on any Atari with 48K, and any compatible disk drive.

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Accent on Basic Computing

by Ron Peters

The Low-Down on Modems

For some of you "politicos," a modem is a Missouri Democrat. However, for most people a modem is a device that allows one computer to talk to another (usually via a telephone line).

The word "modem" is an abbreviation for "modulate-demodulate", which is nothing more than a piece of equipment that translates the electronic signal coming from your computer to one that can be transmitted over the telephone lines. At the other end, the modem translates the telephone signal to one that can be understood by the other computer.

The modem is connected between the computer and the telephone line using a standard telephone cord, and has the ability to dial telephone numbers and control the functions of your computer. Thus, the modem is an interface that allows your computer to "talk" to another computer, even if the two computers are not the same make (e.g., IBM and Atari).

So, big deal. What can you do with a modem? Well, just about anything, including buying a car, transferring money from your savings to checking account, order airline tickets, check the weather in Bodunk, Iowa, play a star-wars game with 10 other people at the same time, talk to a buddy, research the history of shoelaces as they relate to bathing suits, leave messages for other people using a system called electronic mail, download (copy something from another computer to yours) public domain software, send work from your office to your home, and on and on, ad nauseam.

Besides the modem and the telephone line, you will need a communications program that controls the operations of the modem. This program can be purchased with (or sometimes comes with) the modem, or can be obtained through a user group like Novatari. There are several public domain (free) or "shareware" (author asks for a donation) programs available (like Amodem or Express) that do an excellent job.

Like cars, modems come in all sizes and shapes. The basic modem is relatively inexpensive, but the optional extras can drive up the sticker price. The basic "subcompact" modem has less horsepower than the sportier models and

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thus goes a little slower.

The speed of a modem, or how fast it will transmit data over a telephone line, is measured in baud, or bits per second. A 300 Baud modem (about 30 characters per second) was standard for many years, but now 1200 and even 2400 baud is common. Like horsepower, the higher the baud rate the higher the price tag.

The baud rate is directly proportional to the time it takes to transmit data to another computer. Thus, if you are sending data over long-distance telephone lines, the higher speed will cut your telephone costs. However, if you use your modem to mainly access a local bulletin board, speed is not so important unless your time is a critical factor.

Wait a minute, what's a local bulletin board? A bulletin board, or BBS as it's usually called, it nothing more than a computer that is connected to a modem and available by telephone. For example, Novatari has a BBS (named ARMUDIC, but that's another story) that is available for club members to use.

NOVATARI's BBS has a bucket-load of public domain software available to any club member. To get these programs, a member calls the BBS, looks through a menu of software names and descriptions, and selects one or more programs to download (transfer from the Novatari host computer to yours). Using the telecommunications software connected to the modem, the program can be transferred from the Novatari computer to the member's computer via telephone line. It's really quite simple.

The Novatari BBS also allows members to leave private messages for other members, leave general messages for anyone to read (for example, seeking help with a computer problem), etc. It's a lot of fun and a great way to get new games, utility programs, or other types of software right over the telephone line, for free.

In the Washington area there are tons of BBS's either run by a local club or just by some "hacker" out of his home. On top of this, there are commercial BBS's, like Compuserve, the Source, or Genie, that have hundreds of options available to the user. Of course, you pay for these options, usually with a sign-up fee and so many dollars per hour of usage.

Using a modem is easy to do, and if you make a mistake nothing is lost. The worst you can do is disconnect from the other computer and have to redial to make another connection.

Give it a try. It's a whole new world of computing that can be dangerously habit forming.

[P.S. This article was written using *AtariWriter+*, saved to disk, and then transmitted via modem to the editor. He then loaded the article into his word processor for editing and formatting using desktop publishing. Obviously a lot faster than using the mail.]

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#107: ST RAM DISKS. 25 Ramdisks, 7 Auto Loaders (fdcopier, intramdk, loadram, eternal, yard, ultcopy, fastramd, autoramd, mike5, ...)

#113: UTILITY NO.10. TURTLE hard disk backup utility; PROGCALC programmable calculator; UNDELETER undelete your files; FORMAT3; VIDCOL.PRG convert Degas Elite files to ASCII simulations of Vidtex for viewing by Flash.

#117: ST DESK ACC NO. 2. Acc load, eternal, format acc, index, kalklock, mobzdil2, new word, startup1.1.

#121: UTILITY NO. 11. address book, text browser, arxx, format.gem, gem font editor, font loading acc, start1.1

#126: PUB PARTNER UTILITIES. Helvetic and Normal fonts with 18 various printer drivers including Epson, Gemini, Bluechip, Okidata, T321F, SB10F, LQ800F, SMM804, C8510A.

#127: ST FONT EDITORS/LOADERS. Font Loader (High-res only), Gem Font Editor, Ver 1.11, and FED Font Editor.

#131: UTILITY NO.12. Programmer's Utility disk: uudecode, uuencode, bucket, kill, scach, make, setinit, verify, volume, 1_filepr, case, mase, ...)

#132: UTILITY NO.13. Disk library program (Diskcat), two text editors (less & vix), disk copy programs (autodisk, dcopy), startgem, access, rocp.

#144: UTILITY NO.14. Alarm clock acc, C shell, buffer setup prrg., coldboot.tos, display any res DEGAS on any res monitor, script for DEGAS slide show, harddisk auto boot, multiple file printer, mouse ed., spelling checker, rambuffr.acc

#145: UTILITY NO.15. ASL (print out multiple documents), GULAM (command line interpreter), HDSCAN (selectively backup hard disk), LABELS (disk label prg), START-GEM (start GEM prgs from AUTO),...

#154: UTILITY NO.16. MODULA-2 Utilities: context2 Modula-2 editor; m2print ("pretty print" program);makefile utility; qcopy (source for disk copier prg); and m2proc (displays procedures).

#155: UTILITY NO.17. dcopy20; diskfix; megablit drawing prg; most (view text files); qcopy; quiklbl2 (quick disk labels); ymodem batch accessory.

#162: HARD DISK UTILITIES. Directory count (gets around 40 folder limit); C source to HD directory; supra ver 2.61 utilities; turtle HD backup ver 2.15; add multiple HD to supra.)

#166: UTILITY NO.18. disk editor, musical formatter (gercopy), multiple formats (xutility), modify seek rates for 5 1/4" drives.

#185: UTILITY NO.19. Analyze copy protection (diskmech), format disks for Magic Sac, IBM, ST normal/fast read, normal/extended format (dc formatter 2.2), ST maintenance programs (arundisc, brundisc, dspeed, memst1, priveye), v2 of super boot.

#206: UTILITY NO.20. Set screen/text colors & save desktop.inf files for each resolution (Bootup V2.05), Epson font editor; calculator and limited screen plotter in one; fast disk copier; graphic utilities: convert IFF files to comp. Spectrum; show Spectrum, Degas, and Neo pics from one slide prg, convert AIM to Degas and Degas to AIM.

#220: UTILITY NO.21: Your First Utility Disk. Micro-Time Alarm Clock, ST Ramdisk and Printer Buffer, Clock/Calendar, ASCII Printout, DeARChiver, Disk Manager, Disk Directory Listing Prg, and Acc Selector and Resolution setter.

#221: UTILITY NO.22. Arcshell V1.8, ARC Acc, dcformat acc, diskfree (speeds up gemdos diskfree() fn), foldrxxx (take care of 40 folder limit), fselv55 (replace GEM file selector box), superboot 3.2 (all-in-one type boot program).

#222: Desk Pak Plus. (Shareware) 10 desk acc in a single file: clock, calendar, phone book, calculator, appointments, free ram, note pad, copy file, delete file, desktop.

#229: Easy Draw Utility Disk. Fonts: (Chicago 7-36, Courier 7-36, Calig 7-36), Easy Draw Art (18 GEM pics: assissi, box_brd, callig, clip-tmp, dailycal, disk_lbl2, hi-tech, line-brd, pd-art-1, pd-art-2, rocky, scrolbrd, swiss, vhs-lbl).

#234: UTILITY NO.23. ST Floppy Disk Manager V1.0/2.0 (dskscan1), deluxe slideshow V2.0 (dslide2), (Atari ST File System checker/repairer, V1.1 and File System Compacter (hdoptimz), Virus killer prg (penicilin), (Super Directory data file reader (sddfr12).

#238: PUB PARTNER UTILITY NO.2. New PP fonts (cyrillic, helvetic, hudson, and saturn). Printer drivers (hpd, hpf, lq1000f, necp7d, necp7f, and ps-plus). Font editor (w/docs) for creating your own PP fonts.

#242: UTILITY NO.24. ARC Shell II, V1.91, Desk Manager V2.1 allows greater control on system bootup. Ledbetter Utilities, Manager prg for those that use Tempus ed with TDI Modula-2 package (m2grv2), editor of VT52 graphics (vt pro), Redirect Alt-Help key to save screen in Degas format (degasave).

#253: UTILITY NO.25. V6 of item selector (fselv60), disk formatter (cssformt), TOS patch to speed up hard disk writes, backup protected disks, new intersect ramdisk, check disks for viruses, translate IBM Wordstar to First Word.

#254: UTILITY NO.26: **Graphic Utilities**. Various conversion prgs (Spectrum to Degas to Neo, etc), display all 3 Degas on color or mono, save screen as Degas pic, Degas fonts to GDOS, Pic Switch V7, stuff/unstuff Tiny pics, display GIF format files.

#255: UTILITY NO.27: Arc & Arc Shell. Version 5.21 of arc.ttp and share program ArcShell II (Ver 1.95 & 1.96). Includes all C source code to IBM version of ARC.

#260: YOUR 2ND UTILITY DISK. Two great utilities by J.A. Wrotniak: Address Book (acc and prg) and Zap-Card (simple data base program ideal for quotations, record collections, recipies, etc.) All docs included.

#264: XFORMER UTILITY DISK. Disk for **use with the XFORMER** 8-bit emulator (CN #263). Contains DS 8-bit disk w/patcvhed Atari DOS to provide double density DOS for use with XFORMER. Includes Turbo Basic.

#276: DISK CATALOGER and LABEL PRINTER. Compiled dBMAN program. Shareware by Saraware).

#279: ATARI SLM804 LASER DISK. Diablo Emulator 1.2, GDOS Boot 1.2, LCamelot font for Laser.

GAMES

#21: GAMES NO.1. (C) Megaroids, Mastermind, Othello, Backgammon, Ripcord, Target, Life, Journey

#37: GAMES NO.2. (C) BASIC Games(Bomber, Scratch, Switchbox), Celestial Caesers, Ripcord, Score4, Battleship,

Blackjack, Mad Libs, Maze Maker, Mylife, Box the Dragon, Mastermind, hints for SUNDOG.

#39: ARCADE DEMOS. demos of JOUST, TIME BANDITS (ver .96), and CRACKED.

#54: MONO GAMES NO.1. PuzzlePuzzle, move forward through labyrinth by completing puzzles.

#62: HACK. Dungeons and dragons like game-descend into the depths of the dungeon in search of the Amulet of Yendor

#80: MONO GAMES NO.2. MONOPOOL-a pool game with 6 balls; KRABAT-a chess game for beginning to intermediate players.

#100: GAMES NO.3. (C) Football, Break Out, Missile, 4 Adv. Games (Larn, Magnon, Twilight Zone, & Ogre).

#101: GAMES NO.4. (C) Atartrek, Celestial Caesars (V2), Krabit (chess), Twixt, ST Aggrevation, and Star Trek.

#112: GAMES NO.5. (C) Checkers with 6 skill levels; Slot Machine; Warzone; Daleks; Dragon; Nightcrawlers; 5-card stud poker; Breakout; and Yahtzee.

#122: GAMES NO.6. (C) Monopoly, Haunted House, Backgammon.

#135: SHANGHAI DEMO PROGRAM. (color or mono). greeat puzzle game, full implementaton for single puzzle, solitaire version only.

#139: MONO GAMES NO.3 larn2, ogre, ataritrek, maze maker, checkers, battleship, window ball.

#140: GAMES NO.7 (C) Tripple Yahtzee, Wheel of Fortune, Pente, Sensori, Spacewar.

#141: GAMES NO. 8 (C) Azarian and DGDB (similar to SHAMUS).

#153: EAMON ADVENTURE GAMES (Color/Mono) All the latest versions (Eamon Beginner's Cave; Devil's Tomb, Eamon Death Star, Holy Grail, 1st Eamon game version; ver 2.0 of main hall).

#164: GAMES NO.8 (C) Stone Deluxe, Ship Combat, Lander, and Lunar.

#178: BREACH SCENARIOS. 16 Breach scenarios ranging from easy to the star level.

#179: GAMES NO.9: KID FUN #1. (C) For younger kids: musical keybaord player (Kid Notes), simple version of concentration (Barnyward); simplified drawing program (Kid Sketch), doodle drawing program, and keyboard piano (Deluxe Piano Player).

#186: MONOPOLY (C). Includes GFA Basic source code to this popular board game.

#187: WHEEL OF FORTUNE, V2. (C) Game plus 26 individual puzzle files (beatles, child, clothes, computer, fauna, film Lit, Flora, Fun, Old Test. Bible, Software, Shield, Titles, US Air, Vacation, Yum-Yum).

#188: MEAN 18 COURSES NO.1 (C) Cauldron, Peter Pan, Prince 18. NOTE: this disk and the next two require the Mean 18 golf game.

#189: MEAN 18 COURSES NO.2 (C) Devil Driver, Forest 18, Hell Hole.

#190: MEAN 18 COURSES NO.3 (C) Agony 18, Fireline, Watery 18.

#207: STATISTICALLY ACCURATE BASEBALL. No graphics, but lots of strategy. Includes data for 4 teams: ('62 Giants, '70 Reds, '84 Cubs, and '86 Mets) NOT FOR MEGA.

#208: GAMES NO.10. (C) Milborne, G-Ranger, NIM, Trucker, Darts.

#209: GAMES NO.11. (C) Poker, Black Jack, Roulette, and Slots.

#210: GAMES NO.12. (C) 2 variants of Pacman, create jigsaw puzzles from Degas pics, drive race car around track and create your own tracks with Degas, prg to make you invincible while playing Time Bandit.

#211: GAMES NO.13: KID FUN #2. (C) These programs for younger kids: Kid Music, Kid Piano, Kid-Potato, and Kid Mixup.

#212: MONO GAMES NO.4. (M) Spacewar, Megaroids, Runner, and Squixx.

#213: MONO GAMES NO.5. (M) Adventure writing system, Daleks, Krabat2 (play chess), Stocks and Bonds, Eliminator, 2 desk accessory games (breakout and reversi).

#225: BREACH & EMPIRE. 14 scenarios for use with Breach. Collection of maps for EMPIRE players as well as the fixsave program which allows owners of older versions to use the play-by-mail option.

#230: MONO GAMES NO.6. (M) Cribbage, Draw Poker, Mega Maze 1.1.

#240: GAMES NO.14. (C/M) Bog V1.2 (Boggle clone w/dictionary), Core Wars (knowledge of assembly language recommended), Escape (adventure-type maze).

#257: BASEBALL. Play baseball! Includes programs to create your own teams and evaluate the statistics.

#261D: STARTREK. (C) The Next Generation. command your own battle cruiser in this space-age simulation (1 Mb & DS drive).

#269: MONO GAMES NO.7. (M) Anduril, Ballerburg, Diamond Miner, Invaders, and The Snafu Principle. (Includes monochrome emulator program so mono programs can run on color monitor.)

#273: GAMES NO.15. (C) Hacman (Pacman clone), Jumpman (Qbert clone), Escape (adventure game).

#274: GAMES NO.16. (C) Midway Battles (wargame of battle of Midway) and Hero! V1.0 (shareware adventure game).

#275: AIR WARRIER, V0.8. Flight simulator for private practice or multi-player aerial combat simulation on GEnie.

PICTURE DISKS

#40: TINY COLOR NO.1. bee, comet, commie, dire, explorer, fractal, insect, map34, racecar, rockets, sailboat, sghost, snake, spiral, supman, train, troubl, trumpwet, weather, yamato

#41: TINY COLOR NO.2. 520st, aftburnr, amigabla, atari, corvette, courgar4, countach, ferrari, ghostbus, hitchhik, horses, kingtut, klingnon, loudness, miamice, oldmovie, porsche, portrait, rio, startrek, starwars, stoneage, threed, timewars, uranus, waace.

#42: TINY COLOR NO.3. at130xe, at400, at600xl, at800, at800xl, atari, bird, bull, demon, fish, goalie, hendrix, maxell, moon, moon2, mrx, parrot, parts, planets, saturn, shuttle, shuttle2, sun, winter.

#48: TINY MONO NO.1. apple, beagle, brooke, bunny, cad3d, chess1, chrsti, cowboy, hunger, jdxmas, morgan, nature, persian, polarbar, takeon, wetlime, xmascy.

#51: TINY COLOR NO.4. alarm, at810, back, bobevans, brooke, dec, diner, drwhobox, enterpri, escher, fader, flight, floppy, galileo, halley, k9, maxell, morgan, motherst, mttam, newscast, relheat, robot, robottv, romulan, scicover, shut747, st1042, top.

#52: TINY COLOR NO.5. 3dview, aafall, aaflag, aainsect, airport2, alien, boy, bugsbull, bullseye, chaos, chrome, faucet, fonts, girl, girl2, house, jokey, map43i, scicover, startrek, uranus.

#65: TINY COLOR NO.6. altmap, at1200xl, bat, bugs, coyote, dragon3, dungeon, gibson, girl3, marie2, mariel, miamivic, mickey2, mugs, scully, skate, sunset, toyotvan, vanhalen, warriors, wizard, xevious, tinystuf/tinyview.

#75: TINY COLOR NO.7. Pics from PRINT-TECHNIK demo disk: capital, car, carddame, cardking, ct-mag, eifel, fl-pferd, girl6, girl8, gohorse,jacksig, moonastr, pferde, schadma, tina, train PLUS tiny prgs.

#96: TINY COLOR NO.8. bigcats(6-9), davenoe, donald1, eagle, eagle1, elf1, fruit, gorilla, headroom, marilyn, mars, mona-ami, pluto, ronald, tinyview/tinystuf.

#108: TINYPICS NO.1. Ghost Busters (cabbie, danak, danblast, demon2, demon4, gostmbl, marshm2, sigg2y2, sigourne, stay-puf2, vincel2, weenie); **Raiders** (leathomp, lighteye, ouch, spike, wellofsl); tnyview3.prg, tnystuf2.prg.

#109: TINYPICS NO.2. Empire Strikes (ata1, darth, falcoln2, falcon, hansolo, stardes2, tiefigh2, xwing, yoda); **Shuttle** (astronau, blastoff, ground, landing, landing2, piggybac, spaceman, spmanclr, tower, treads); TNYVIEW3.PRG, TNYSTUF2.PRG.

#118: TINYPICS NO.3. Sci-Fi (alien, cybermen, darkness, davros, depspace, drwho, lo, judith2, kingon, mornstar, pike, pinets, romulin, saavik, saturn, shipfire...)

#119: TINYPICS NO.4. Transport (autodesi, bicycle, boat, cnvrtabl, colorcar, corvette, cycle4, express, f14tomct, f15, f15strk, ferrari, mazda, model, ninja, por911,...)

#120: TINYPICS NO.5. Cartoons No.1 (birds, bugs, bully, circus, coyote, daffy, ddcar, disney, disnmick, duckdodg, flightc1, malefcnt, martian, mickey, pengy, roadrnnr, snowwhite.)

#137: TINYPICS NO.6. Cartoons No.2 (banana, beetle bill, bilnopus, buzzybe2, capnopus,dungeon, ewoks, flower, garfield, gumby,hagar,heman,malthar,odie,pebbles,.)

#138: TINYPICS NO.7. Animals (abstrc15, bigcat10,11,16, chatter, cheval, cougar, elk, fish, fish2, flycatch, flyhorse, gorilla, horses, moth, parrot, poco, tiger2,...)

#146: TINYPICS NO.8: Famous Folk (alien, avalon, baby2001, double, face1,2,3, firestart, ladyhawk, madonna2, marie2, mariel, mean, monalisa, rio, robot, ronald, termn8er, thief, wmms_buz)

#161: TINYPICS NO. 9: Vehicles No.2 (monochrome: B-36, bel222b, escort1, extra1, f15strk, hele, mgtf, phalarop, refuel, romulin, shuttle1:2, sparrow, sr-71a, stealth, topgun, travel2, U-2, vaxhall)

#182: SPECTRUM PICTURE DISK. (C) spslide5 prg & 8 pics (aztec, goya, phil2, pompei, renoir, riveria, soralia, and the party).

#183: SUPERNEW DEMO. (C) New Neo picture show that plays mushc and displays a (user editable) horizontal scrolling text bar at the bottom. Note: texshow.tos needs older monitor. Slideneo, neofun, windows, and 9 pics (dragon, einhorn, midearth, monopoly, moreta, porsche, queen, tutuench).

#204: SPECTRUM SPACE NO.1. (C) 8 pics (Crab, earth, moonflag, orion, nasa1,

nasa2, nasa3, patch1). Includes spslide8.prg.
#205: SPECTRUM SPACE NO.2. (C) 7 pics (Apollo 9, Apollo 10, Astro1, Earth1, Earth2, Earthris, Lem). Includes spslide8.prg.
#251: LAMBERT PICS NO.1. 16 low-res Degas Elite pics (ace, spidey, viking, space, phobe, madonna, madonna1, madonna2, cybill, dragonpr, kitty, elie3, horsecrcol, monkey5, football, cowboy.)
#266: LAMBERT PICS NO.2. Spectrum picture show (baseball, cobra, eagle, robocop, samfix1, samfox2, toucan, xformer2, spslide8.prg.
#268D: THE PLANETS. Degas picture show (w/51 pictures) that provides an excellent graphical tour of the planets in our solar system.
#271: LAMBERT PICS NO.3. Pictures by Rafael Nunez (Degas Elite: boat, bruce, carol, catstvns, cindy emberg, fantasy, favour, house, jacko, klingon, lin and dslide.prg).

CLIP ART

(Note: the color pictures above can often also be used as clip art in programs such as Publisher ST or Publishing Partner.)
#147: COLOR CLIP ART NO.1 (avlabels, dikclip1, disnyclp, dav1:2:3:4:5, fantasy, fun, history, kids, macfctry, macpaint, maninspc, map1:2, men1:2, paint2:4:5:6:7:8, picture1:2, sport1:2, women1:2)
#158: MONO CLIP ART NO.1 (animals, flags1:2, symbols1:2:3, astrology, custom 1:2:3:4, christian, military1:2, transla1:2:3:4:5)
#159: MONO CLIP ART NO.2 (10 screens of uncompressed holiday and 'fun' clip art.)
#160: MONO CLIP ART NO.3 (bluejay, canadago, carstruk, cheata, chipmunk, clipart1:3:4:5:6:9:B:C, grabber, jaguar, sports1:2:3:5)
#239: CLIP ART NO. 5. Holidays and Headers, 28 screens full of excellent clip art. Disk includes Picsw7 and dslide (C or M).
#245: CLIP ART NO. 6. Mac Art 1. Mac Art Library. 27 screens (#1-27) of Mac clip art. Includes tinyview, tinystuf, dslide.
#246: CLIP ART NO. 7. Mac Art 2. 24 screens (#28-51) of Mac clip art. Picswitch07, tinyview, tinystuf, dslide.
#247: CLIP ART NO. 8. Sports. 24 screens of Mac clip art for sporting events. Picswitch7, tinyview, tinystuf, dslide, snapshot.
#248: CLIP ART NO. 9. Whimsey. 21 screens of whimsical clip art. Picswitch7, tinyview, tinystuf, dslide, snapshot.
#249: CLIP ART NO. 10. Food 1. 27 screens of food clip art. Tinyview.
#250: CLIP ART NO. 11. Food 2. 22 more screens of food clip art. Tinyview, tinystuf, dslide, snapshot.

GRAPHICS DEMOS

#64: DOLL ANIMATION DEMO. Spinning dolls demo. Requires 1Mb, (C).
#66: GLOBE DEMO DISK. Spinning world globe, rich2, sphere, stpatterns, supbox. Requires 1 Mb, (C).
#67: BALL/BIRD DEMO DISK. Ball bouncing on mirror with multiple light sources & flying bird demo. (C)
#90: SHINNY BUBBLES. Color demo shown at COMDEX '86.
#105: CN MOVIE. Demo of animation effects possible on your NEO and DEGAS pictures using MAKE IT MOVE. (C)
#115: ANIMATOR DISK. The Aegis Animator Player with four ARC'ed routines to play. A public domain animator of sorts to have fun with.
#128D: STEELYBOINKI. By Tom Hudson, math by Mark Kinball. (C)
#129: SPHERESI DEMO. By Steve Belczyk. (C)
#151D: SPACE PROBE. A Cybermate animation (DS & 1 Mb).
#152: PD3CTL. Motion control language for use with CAD 3-D, Ver. 2.0.
#172: JUGGLER DEMO. Graphics demo of juggler w/3 balls (from AMIGA).
#173D: CYBERSCAPE. Animated graphics demo from ANTIC. See disk change into spaceship, fly into and explore inside of Atari ST. 1MB and DS drive. (C)
#174D: STAR TREK ANIMATION. Several animated pictures featuring the starship Enterprise, constructed using CAD 3D. (C)
#193D: CYBER FAMILY DEMO NO. 2. 4 Cyber animations: Sphere, Backflip, Bounce, and Anticado (C).
#202D: CYBER DEMOS & UTILITIES. 4 animations: chasers, elmsk31c, scout, and texture (C, DS, 1Mb).
#203: SPECTRUM BALL DEMO. 5 metal balls, hanging from rack, with 1st & last alternatvely swinging in and out. (C)
#214: SPECTRUM 512 MOVIE ANIMATION. Imitation of Amiga demo that shows 4 monitor screens at the same time each with a different animated display.
#227: CASTING D'ENTERPRISES. An impressive demo of the animation and graphics capabilities of the ST. This French "film" runs for about 7.5 minutes.
#235: CYBER DEMO DISK (4 animations: CAMFILM, PSLOGO, RAISINS, and SAUCERB, with animate3. prg).
#259: GRAPHIC DEMO DISK. Many Boink, Star Field, Degas Elite pics (500xjrev, anigakil, bill, hardrock, hitguide, hradiosc, armstron, qwert, surfcity), showpic2.prg.

TERMINAL PROGRAMS

#88A: UNITERM VT102 EMULATOR, Version 1.7B. (UNITERM emulates VT102/220 text terminals and Tektronix's 4014 graphics terminal. Includes XModem and KERMIT protocols.)
#142: TERMINAL DISK NO. 5. Kermit, QT, Zenith, Zmodem, Forem Tutorial, Flash download, GEM Terminal prg.
#167: TERMINAL DISK NO. 6. wterm, bmodem, trans100, and amulti V1.4.
#180. STARNET BBS. Bulletin Board System with xmodem protocol.
#200: TELECOM NO. 3. K-I-S Terminal Ver 3., ST Talk Professional Demo, VTX Terminal prg (all arc'd).
#201: FLASH-INTERLINK UPDATES. Create Flash DO files, auto download, logon, update to V1.52. Interlink files for ANSI emulation V1.12 and TXF transfer protocols. (Requires Flash 1.51 or Interlink).
#265: VANTERM, Ver. 3.71. A full-featured terminal program with xmodem, ymodem, and internal ARC support. This update adds Vidtex graphics and Shadow support.

SOUND/MUSIC

#60: MUSIC STUDIO SONG DISK NO. 1. Some 50 songs for MUSIC STUDIO
#76D: PRINT-TECHNIK SOUND DIGITIZER DEMO. 1Mb, DS drive, color.
#78D: DIGITAL SOUND DEMO NO.1. OXYGEN-Disco Version 1Mb, DS
#79D: DIGITAL SOUND DEMO NO.2. FOREIGN AFFAIR-(by Mike Oldfield),1Mb, DS
#99D: DIGITAL SOUND DEMO NO.3. MATT'S MOOD - (by Matt Bianco), 1Mb, DS
#114: MUSIC STUDIO DISK NO.2. Over 40 SNG files for use with Music Studio that play without a MIDI keyboard/speaker system
#134: ST-REPLAY. Digitized sound demo of ST-Replay. Sound (C or M). Picture (C).
#196: CHRISTMAS DISK. (C) Set of Christmas melodies along with holdiday pictures (Deck the Halls, Jingle Bells,Jolly Old St. Nick, Little Drummer Boy, Silent Night, We Wish You a Mery Christmas.
#197: MUSIC STUDIO DISK NO.3. 65 Music Studio songs (MIDI) w/PD player.
#198: MUSIC STUDIO DISK NO.4. 75 Music Studio songs (MIDI) w/PD player.
#199: MCS SONGS NO.1. 32 Music Construction Set songs w/PD player.
#216: MUSIC STUDIO DISK NO. 5 (C) 70+ Music Studio songs. Includes PD player so you can create your own music albums.
#217: MUSIC STUDIO SONG DISK NO. 6. (C) Another 70+ songs. Includes PD player so you can create your own music albums.
#218D: PLAYIT DEMO NO. 1. Input sound file from ST Replay and output file that can be played with either of 2 player programs provided. Disk includes collection of ready to play 'SND' files. Here your ST Talk.
#236: PLAYIT DEMO NO. 2. More digitized sounds for your ST: Adam 12, Dragnet, Mr. Ed, Subether, and Synclock.
#237: MUSIC STUDIO DISK NO. 7. 35 Music Studio songs. Includes 2 PD players and prg to convert 8-bit Adv. Music System (AMS) songs to Music Studio formats.
#244: MIDIPLAY DEMO. Demo of MIDIPLAY V4.25 by Electronic Music Pub. House, includes 2 songs: Mozart Gavotte and Bach G Minuet 2. Need MIDI instr. for best effect.
#267D: GHOSTBUSTERS. Digitized music (Ghost Busters). 1MB and DS drive.

LANGUAGE DISKS

"C" Language

#33: SAMPLE "C" PRGS NO.2. cc, digit, fixed, debug, qio, pi3con, printdir, ramfree, sound, ttool, vdisamp, windtst, and more.
#82: SAMPLE "C" PRGS NO.3. 3d, artwork, arxx, cc, clock, fractal, li, palette, print, qix, startup, ttool2, qio
#123: SHAREWARE C COMPILER. By Mark A. Johnson. Includes C compiler, PD Ramdisk(s), PD command line interpreter, MicroEMACS text editor and bootup utility.
#133: SAMPLE C PROGRAMS NO.4. Source to code uudecode & uuencode, kermit.acc, citadel BBS & utilities, and VC_clone (spreadsheet program).
#156: SAMPLE "C" PROGRAMS NO. 5 (source for file selector box, two make utilities, source for QT term prg, term prg that supports xmodem, ymodem, and zmodem.)
#171: SAMPLE C PROGRAMS NO. 6.

bmodem *(terminal emulator), sealink (transfer protocol), sed, ctag (two unix-type utilities).

#223: SAMPLE C PROGRAMS NO. 7. C source programs for ARC.TTP, a C compiler,formatting disks at 11 sectors/track, disk formatting program, code for accessing TNY file formats, and a cross assembler to 6809 CPU-based systems.

#231: SAMPLE C PROGRAMS NO. 8. HACKSORC--source to the game HACK. PENICILN--contains source to an ACC to help protect against computer virus as well as the ACC itself.

#277: GNU C Complier (C) 1988 by Free Software Foundation Inc.

Pascal/Modula-2

#31: PASCAL & MODULA-2. PASCAL: OSS files (4/18/86), 8 demo prgs. MODULA2: GEM demo; BIOS and XBIOS functions; 11 files not yet tested on ST; VT52 emulator escapes.

#49: SAMPLE PASCAL PRGS NO.1. 46 files including 34 different PASCAL routines and docs from OSS BBS.

#83: SAMPLE MODULA-2 PRGS NO.1. Shell for ARC.TTP w/source; files for line A calls; patches to V2 of Modula 2; cmd line interface; list dir; format disk; display free RAM; Huffman compression algorithmn.

#92: SAMPLE MODULA-2 PRGS NO.2. Includes ST Speech Modules and other enhancements to Modula-2.

#93: SAMPLE PASCAL PRGS NO.2. Includes latest from OSS BBS plus source for CHECKERS, a spelling checker, more...

#110: MODULA-2 SAMPLE DISK NO.3. Complete set of Modula-2 source code from the BBS of The Journal of Pascal, Ada & Modula-2; Samples of building library modules using AES calls; Source to access Russ Wetmore's Clipboard routines; String Library routines and more.

#111: PASCAL SAMPLE DISK NO.3. Complete source to ATARTREK (Star Trek for the ST); Complete source to CHECKERS; Sample routines to format a disk from the OSS BBS; Sample routines to read in a DEGAS picture file; GEMDOS calls from Pascal and more.

#177: SAMPLE PASCAL NO. 4. Handle special keys (getkey); statistical analysis (pas stat); get BIOS parameter block (getbpb); displbay all filenames (fulldir); dealwith complex numbers (complex).

#232: MODULA-2 SOURCE DISK NO. 4. GEMMODUL--very useful and large assortment of modules to ease the use of GEM functions. MATHTRAP--collection of modules for adding more math functions. THEACC-- an ACC that gives 2 formatting formats, numerous copying options and disk DOS type commands all in one acc.

Forth Language

#53: ATARI ST FORTH-83 MODEL. Written by Laxen & Perry, includes FORTH language, editor, assembler, decompiler and Atari xbios functions.

#71: FORTHMACS WORKING DISK Ver. 1.1. (c) 1986 by Bradley Forthware, Forthmacs is one of the very best Forth systems available today.

GFA Basic

#130: GFA BASIC PROGRAMS No.1. GFA Run only version, terminal prg., sprite ed., torpedo game, fractals, archshell, format2, drawing prg., graphics demos:fx, display, gfa_cube.

#168: GFA BASIC PROGRAMS NO.2. Source to stone deluxe, ship combat, and recalbdb V2 (record album db incl. source and runtime prg).

#169: GFA BASIC Seven tutorial and tip files on using GFA BASIC by John B. Holden, graphics tutorial, plus med rez galloping horse.

#170: GFA BASIC PROGRAMS NO.3. diox V0.95 (easy user interface for simplifying construction of dialog boxes in GFA Basic, outputs GFA source file.)

#186: GFA BASIC MONOPOLY. (C) Includes GFA Basic source code to this popular board game.

#191: GFA BASIC NO. 4. GFA "tip" files 8-11. Paing program, 3D Tic-Tac-Toe (mono); variable cross reference, line numbering.

Other ST Languages

#124: ATARI ST ICON LANGUAGE, V6.3. This ICON language (a follow-on to SNOBOL4) from the U. Arizona was implemented by O. Rick Fonorrow and Jerry D. Nowlin.

#181: XLISP 2.0. Latest version of XLISP (w/language called VPS5). Docs from Ver 1.7 included).

#224: TOY PROLOG. This language operates exactly like the system described in Programming in Prolog by Clockrin & Mellish. (Note: complete docs BUT in German!).

#262D: LITTLE SMALLTALK, Ver 2.0. Latest version of this new computer language. Includes C source code. Requires DS disk. (replaces CN#97).

#263: ST XFORMER, Ver 2.1. Atari XL/XE emulator. Atari 8-bit Basic included. Requires 1Mb, (Cor M).

#264: XFORMER UTILITY DISK. Disk for use with the XFORMER 8-bit emulator. Contains DS 8-bit disk w/patched ATARI DOS to provide double density DOS for use with XFORMER. Includes TURBO BASIC for XL/XE computers.

Tutorials

#148: GEM TUTORIALS, Columns 1-10 (windows, dialog handler, resource files, rsc tree structure, raster operations, menus, user interfaces, VDI graphics)

#149: GEM TUTORIALS, Columns 11-17 (GEM hooks, GEM events, form manager, user interfaces-2, coping with GEMDOS, interface potpourri #1, PC/ST Rsc converter)

#278: ATARI ST APPLICATIONS PROGRAMMING (c) Bantam Books. Contains source and compiled programs from book by same name.

COMMERCIAL DEMOS

#106: SMOOTH TALKER DEMO. (C) Demo of 5 talking educational programs from First Byte: Speller Bee, Kidtalk, Mathtalk, First Shapes, Speech Sampler.

#157: MULTI-LINGUAL WORD PROCESSOR DEMO. By Drew Haninger. Includes Russian and Arabic fonts with demo font editor. Complete DOC file included.

#219D: DBMAN DEMO DISK. Demo of Ver 4.0 of dBMAN. Data bases limited to a max of 20 records.

#228: SUPERCHARGED EASY_DRAW SLIDE DEMO. Self-running demo of the capabilities provided by Migraph's new SUpercharged Easy Draw. (M)

#252: IRATA VERLAG DEMO DISK (mono, 1MB). Label Professional Program, SPAT Program (Desktop Publishing), DiskManager (Keep your list of programs of all sorts of extenders.)

#256: OIDS DEMO (C) Demo runs through quick demo of OIDS thenlets you play until you crash rocket. Includes 6 galaxies for those who already have OIDS.

APPLICATIONS

#14: NEOCHROME. Atari point Program, docs, pictures. (Color only)

#68: CAD 3D PICTURES. A dozen or so picture files for use with TomHudson's CAD 3D Program

#103: SKYMAP. (mono) 1,560 of the brightest stars. Display map of stars, find a particular star, or identify a particular star.

#163: EDITOR DISK. Includes PROEDIT by Jerry Cole: general purpose programming editor with outline feature; and ConTEXT by Don Milne, designed for use with Modula-2, but a good editor with any language.

#165: LIBRARY PROGRAMS. Menu.prg, diskcat V1.3, turtle companion.

#176: ST WRITER ELITE, V2.52. Latest version. Supports multiple printers. English, German, and Spanish versions included. Complete Docs.

#192: MICROEMACS, VER 3.9. Text editor, includes MicroSPELL spelling checker.

#215D: A.I.M. Ver 2.3 (DS) Atari Image Management System (C or M). Image manipulation program from Germany (can read in NEO or DEGAS pics).

#233: SHEET. Shareware spreadsheet program by Mr. Chor-ming Lung. Includes complete docs.

#241: VDOS (Virtual Disk Operating System). Shareware graphic interface for easier access to frequently used programs. Includes many command options frequently contained within command line interfaces.

#243: BOWLMAN, V1.22. Shareware program by George Terpening, Bowling Manager, helps you keep track of bowling statistics for yourself, your team, and your league. Files ARC'd.

#258: PRIME BETA/DEMO VER 1.3 (1 Mb). Numbers... unlock the secrets of your life, advise based on numerology: personal numbers, alpha-numeric strengths and weaknesses, personal year, personal month, personal day, personal eras, personal challenges, predictions, mates and partners, choosing names and addresses.

#270: QUIZ PLUS. Computer Assisted instruction system let your ST teach you. Sample lessons provided instruction (w/ pictures). (C) NO MEGA.

#276: DISK CATALOGER AND LABEL PRINTER. (Shareware dBMAN program by Saraware).

CURRENT NOTES PC LIBRARY

The disks listed below are in IBM format for use with pc-ditto on the ST or directly with any IBM or compatible PCs using 3.5" drives. Note: all disks require a double-sided drive. The disks marked with an asterisk (*) are formatted for 720K.

PC-01 PROCOMM, V2.3: Terminal Emulator Program (Shareware) also MINIHOST, host BBS system.
PC-02 PC-STOCK, CARDEX: PC-Stock: general purpose stock trend analysis program. CARDEX: a rotary index card file equivalent to a Rolodex.
PC-03 QEDIT: QEDIT: the Quick Editor A fast text editor, uses all available memory, allows split screens and multiple file editing.
PC-04 PC-OUTLINE, V1.05: An outlining and planning program, allows you to randomly enter any kind of info and then organize it into hierarchial structure.
PC-05 AS EASY AS: Powerful spreadsheet (1,024 rows by 256 cols) with a large set of menu command features.
PC-06 PC-DBMS, FLOW CHART: PC-DBMS: v1.2, data base programs. Flow Chart Utility and Mortgage Calculator program.
PC-07 EASYBASE, BANKBOOK: EASY BASE: Data base for new users with med size applications. HOME BANK BOOK: keep track of your funds in bank-book style system.
PC-08 TIMESAVER & PFM: Timesave: calendar/appointment book. PFM: Personal File Management System
PC-09 POKER & STAR TREK: DRAW POKER, V1.0: simulates Nevada video draw poker machine. MS-TREK 1.0, Star Trek Adventure Game.
PC-10 ZIP: The Ultimate Utility Includes ARC and de-ARC and terminal program with XMODEM transfer.
PC-11 A.D.A. PROLOG: Ver 1.90 Complete Prolog language with documentation.
PC-12 FREE WORD: Version 1.0 PC Word processor with docs, demo, and reference.
PC-13 VISIBLE PASCAL: Pascal learning system, language, editor, docs. Allows simultaneous view of output and source code to help learners debug their programs.
PC-14 KIDGAMES: Alphabet, Animals, Clock Game, Hangman and Mosaic.
PC-15* FAMILY HISTORY SYSTEM. A family tracking system. Disk includes original Basic source plus compiled version, full docs, and sample files. 720K.
PC-16* PC-FILE+: Jim Button's popular database filing program. Includes Utility Disk with 250pp documentation. 720K.
PC-17 PC TUTORIAL: An educational package that covers the basics of a 1st course in computer usage and the IBM PC operating system.
PC-18 PC DOS HELP: An online Help facility for DOScommands.
PC-19* PC-WRITE: Powerful, easy-to-use word processor. Program, docs, printer drivers. 720K.

Price Schedule

If the total number of disks is 9 or less, the price is $4.00 per disk; 10 or more, $3.80 per disk; 20 or more, $3.60 per disk; 30 or more, $3.40 per disk; 40 or more, $3.20 per disk; 50 or more, $3.00 per disk.

Add $1 per every 6 disks (or fraction thereof) for shipping and handling up to a maximum of $6.00.

Order disks from CN Library, 122 N. Johnson Rd., Sterling, VA 22170 Note: standing orders for every new disk released each month are available. Call (703) 450-4761 or write for details.

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Note: ANALOG #41 is equivalent to ST-LOG #1. Starting with Jan. '87, ST-LOG (#10) became a separate publication no longer included in ANALOG. In most cases, documentation is not on the disk but can be found in the appropriate issue of Analog or ST-Log.

#A01 (Apr '86) anykey, mod1, mod2, mod3, mod4, sort, num2prt, strings1, stcheck, gemdemo, scratch, pics(boat, daffy, desert)
#A02 (May '86) craps, sounder2, colors512, celest, popcorn, pics(stlog41, after, davros, gerwalk, zgundam)
#A03 (Jun '86) arrays1, arrays2, calcpi, guesnum, mandel, calculat, doodler, sampler, pics(parts, circus, escher), target.prg
#A04 (Jul '86) 3ddemo, twogame, pianokbd, fraction, input, funchelp, pics(fish, gorilla, porsche, stlog4, countach)
#A05 (Aug '86) ccdemo, deluxe piano, image, numbers, pointer1, pointer2, superbox, st solid states.
#A06 (Sep '86) minos.acc, dx.ttp, dx.a, format+.bas, dmdemo.prg, pics(utterfy, demon, eagle1, madonna, phantom, rick1, speed)
#A07 (Oct '86) cmanship, puzzle, windows, ezsq, biclock, yahtezee, fortune.acc, pictures.
#A08 (Nov '86) stboxes, ballit, stocks, graphics, graphpro, pics(epsgem, necpro, shuttle)
#A09 (Dec '86) vdidemo, dragon, fax, poolmono, life, pics(fgordon, kolboink, porsche, wizrdc1, stlog49)
#A10 (Jan '87) C-manship; Dr., Floppe; font tricks; slider subroutines; spell binder; windows part 1.
#A11 (Feb '87) C-manship; apcalen.bas (appointment calendar); create.prg (database create prg); money.prg (money program w/C source); windows part 2)
#A12 (Mar '87) C-manship; asm_edit.prg (AS68 Helper prg); pokrdicn.bas (poker dice listing); score4.prg (score Four prg w/C source); Midisoft demo prg)
#A13 (Apr '87) C-manship; Escher Cubes prg; Arc Shell prg w/source; Ray-gracing demo; uniterm.prg (pd terminal emulator); arcx.ttp (unsqueezer prg).
#A14 (May '87) C-manship; clock desk acc; hello.prg (assembly line prg); CZ-Patch prg; music.bas (steps & triads); cubed.bas (escher cubes source); tvision (basic source & compiled prg).
#A15 (Jun '87) C-manship; ins and outs of menu bars; STLabelmaker; Animation w/ PASCAL; Printer fonts.
#A16 (Jul/Aug '87) C-manship; Looking into Windows; Floyd the Droid on the Run, Raster Sprite Editor; Desk Manager; Assembly Line.
#A17 (Sep '87) C-manship (window2.c, window2.prg), floyddh1.arc, floyddh2.arc, rammer.arc, transfer.arc, xformer1.arc, xformer2.arc.
#A18 (Apr '88) C-manship (window3.c, window3.prg), Assembly; GFA Basic (examples 1-5); Check Disk program; Convert; Mouse accessory.
#A19 (May '88) C-manship (window4.c, window4.prg); Assembly; Art Gallery, Crin's Castle, Strathello.
#A20 (Jun '88) C-manship (pictures.prg); Assembly Line (cipher2.prg); Basic Draw, Mouse-Ka-Source, Decimal Destroyer, ST Font Printer.
#A21 (Jul '88) Battle Blips, Busey Buddy, Dialxr, Moonlord ST.
#A22 (Aug '88) Altered STeights, GEM Kit, Merlin's Box, Microcompositions, MIDIMON, Sprite Programming, VBI's from C.
#A23 (Sep '88) C-manship (Date program, I), Double column printing, Degas font loader, Opus spreadsheet.
#A24 (Oct '88) C-manship (Date program, II), Assembly line (multiply.prg), Monkeys & Balloons, Spectral Sorcery.
#A25 (Nov '88) C-manship (Box.prg), Theta Ten, Number Maze, Ultra-Graph, Laser C Review.

New ST Disks for November

#277D: GNU C Compiler. An updated (double-sided) disk with the GNU C compiler, assembler, archiver, linker, library, documentation and a patch. (Source code on CN288-CN291). NOTE: return your copy of CN277 for a free replacement of this update. If you do not have DS drive, be sure to tell us.)

#280: LAMBERT PICS NO. 4. (PC1 & PC2: annivers, beach, bell22b, cost, cb, cigs, cover36, daleck, deadship, dune2, dune4, dune5, dune6, girl3, hdlburg, helper, indy500, jimminy), dslide.prg.

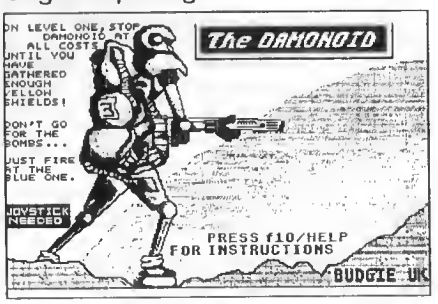
#281: MANUAL MAKER. Use GDOS and GDOS fonts to produce attractive manuals.

#282: DAMONOID. (C) Arcade game. NO MEGA.

#283: ADVENTURE GAMES. (System 5, Once a King, and El Bozo's City Out of Bounds).

#284: DESK ACC NO.3. Mouse doubler (double, triple, or quadruple movement of pointer relative to mouse movement), mouse editor (create animated mice), address book. Double Click Software's clock (V3.3), Formatter (V3.0), and Stuffer (put up to 32 accessories in one acc slot.)

#285D: STAR TREK (AVS). Original opening to Star Trek and a well done animation sequence. Incl. animate3.prg and playit.acc. NOTE: with START's AVS program, this and the next two disks will show animation and play sounds simultaneously.



#286D: CALIFORNIA RAISONS (AVS). Famous singing raisons.

#287D: MIAMI VICE (AVS). Theme song played by animated band.

The following four disks contain the C source code for the GNU C compiler (CN #277D).

#288: GNU C Source: Make and Other Utilities.

#289: GNU C Source: Assembler

#290: GNU C Source: Compiler (Files 1 & 2) and header files.

#291: GNU C Source: Compiler (File 3); DIFF source and a collection of documentation.

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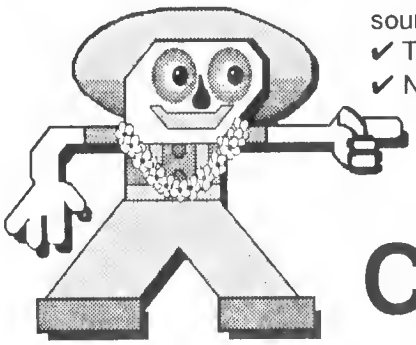

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DIVE BOMBER

Sink the Bismark & Win the War

Review by Roger Abram

The Fantasy. The engines on the Avenger sputtered to life as the navigator double–checked the flight plan that would intercept the Bismarck due west of England. It had been the longest day of his life and he wondered how it would end. Would this unproven bucket of bolts perform as the top brass had promised, or would the icy waters of the Atlantic be his bed for the evening of May 26, 1941?

One by one the engineer checked his gauges:

- ✓ arrester –– up,
- ✓ fuel tanks –– set to main,
- ✓ fuel level –– all tanks full,
- ✓ fuel mixture –– rich,
- ✓ ignition –– on,
- ✓ oil pressure/temperature –– o.k.,
- ✓ RPMs –– o.k.,
- ✓ landing gear –– down,
- ✓ throttle –– high,
- ✓ torpedo –– loaded,
- ✓ wings –– locked, and
- ✓ engineer –– nervous.

The tail gunner waited endlessly as the choppy waters bounced the British aircraft carrier Ark Royal and its temporary passenger, the Avenger, up and down. He could stomach unloading round after round of artillery into the bellies of German Dornier aircraft, but sea legs never came easy for this member of the U.S. Navy. He wanted to get airborne.

Up in the cockpit, the pilot watched for the final signal to release the brake and get the mission underway. In front of him were the airspeed gauge, the altimeter, the artificial horizon, compass, inverted T–bar showing the position of the ailerons and rudder, the torpedo lever, vertical speed gauge, and the yoke. He had flown the plane many times before and knew it was airworthy. But it had never been tested in real combat and he wondered if it could hold its own against German aircraft, E–Boats, U–Boats, and the Bismarck itself.

A few minutes later the Avenger lumbered down the runway of the Ark Royal and, under the cover of darkness, a new chapter in history was about to be written. Well, almost. You see, the crew of the Avenger has just entered The Computer Zone... where time and dates blend with reality to create new dimensions for simulations. What this crew doesn't realize is that the plane they are passengers on will not really exist for more than a year. But don't tell these victims of sprites and sound––their journey has just begun.

The Game. *Dive Bomber*, by U.S. Gold, puts you in control of the Grumman Avenger with one sole purpose –– sink the Bismarck, one of Germany's largest and most powerful fighting ships with a crew of over 2,300 men. Since the Avenger did not have a hand in the sinking of the Bismarck, the scenario is pure fiction. But a fun one at that.

As pilot of the plane, you have control over the four main battle stations as outlined above –– tail gunner, navigator, engineer, and pilot. Each has its own screen which is selected by pressing either 1, 2, 3, or 4. Simple enough.

In addition to the gauges outlined above, there is a gunsight which is controlled by the mouse/joystick and a Screen Selection Box which flashes when one of the battle stations needs attention. For instance, while battling German aircraft in the forward screen (#1), a flashing red light (#4) warns you that enemy fighters are approaching from the rear.

Based on the proximity of German boats, enemy planes, mines, and the Bismarck to the Ark Royal, you select the level of difficulty from a handful of missions at the beginning of the game. The harshest of them all has the Ark Royal virtually surrounded and the Bismarck miles away. In order to be able to refuel and rearm for a later rendezvous with the Bismarck, you'll have to keep the Ark Royal in one piece by fighting off the fast approaching foreign intruders.

Down in Flames. The easiest combatants are the Dornier aircraft. By simply gliding the gunsight across the screen with the mouse, it's easy to click on round after round and watch them go down in flames. The same applies for the sea mines. The boats, however, are another story. You can monitor your relation to them on the navigator's screen, but you never really see them until the night sky lights up with their anti–aircraft guns. There's time for only a quick round or two. If you sink one on your first pass, consider yourself fortunate. If not, you'll have to decide whether or not to press onward or circle around and take your chances with their anti–aircraft guns again.

After each engagement with the enemy you should check the damage inflicted on the Avenger by bringing up the Display Status screen. If a high percentage of damage has been done, it's wise to return to the Ark Royal for repairs. The same screen also reports on any damage that the Ark Royal may have suffered.

The Attack. When the time finally arrives for the attack on the Bismarck, the torpedo is dropped when the ship comes into sight and then the game abruptly ends. The onboard "camera" watches as the torpedo races toward the Bismarck. If you fired the torpedo too soon, you get a message saying you missed. If it's a hit, you get to see the fruits of your labor. My only complaint with this otherwise fine arcade/strategy game (with the emphasis on the former) is just how quickly it does end. You get only one chance at the Bismarck and that's it. You can even accidentally fly over the ship at an altitude where you don't even see it down below and the game will still end saying that you missed.

Dive Bomber has decent sound and graphics and is a fun game to play when you need to flex your trigger finger. If you want to hightail it and just go for the Bismarck on an easy mission, your time investment will probably be less than fifteen minutes. Fortunately, there are practice modes for takeoff, landing, flying, and attacking the Bismarck. Plenty of practice on attacking the Bismarck will result in a less frustrating ending in a real game.

Distributed for U.S. Gold by Epyx, P.O. Box 8020, 600 Galveston Drive, Redwood City, California 94063. List price $34.95. Color monitor only.

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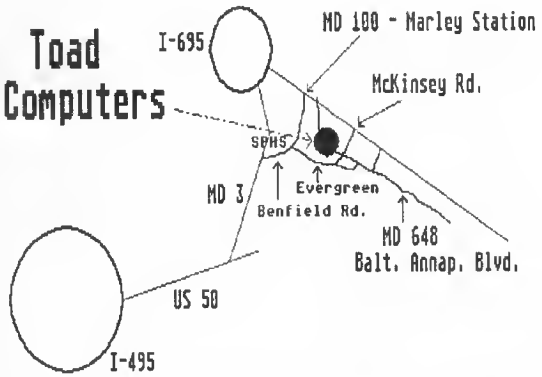

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CLUB CORNER

This space is made available to WAACE member clubs for their use in publicizing activities. Material for this column must be in the hands of the WAACE Club Editor by the 10th of each month. Send copy to John Barnes, 7710 Chatham Rd, Chevy Chase, MD 20815. Material can also be uploaded to the ARMUDIC BBS.

NOVATARI

Northern Virginia Atari Users' Group

President.....G.Weatherhead 703-938-4829
VP-ST .....Ian Charters.....703-845-7578
VP-8BIT .....Alan Friedman.....703-425-0575
Membership.....Earl Lilley 703-281-9017

New Members: Dues are $20/year/family which includes a subscription to *Current Notes* and access to more activities. Join at the main meeting or at a chapter meeting or by sending $20, payable to NOVATARI, to Earl Lilley, 821 Ninovan Rd.SE, Vienna, VA 22180.

Novatari Main meeting: second Sunday of the month at the Washington Gas Light Building, 6801 Industrial RD, Springfield, VA. Take 495 to east on Braddock Rd. (620) to south on Backlick Rd.(617). Left on Industrial Rd. Washington Gas Light is the second building on the right. 5:30 Telecom SIG; 6:15 announcements, open forum, door prizes; 6:45 VAST and 8BIT SIG meetings.

Chapter Meetings: Mt. Vernon/Hybla Valley, 1st Thursday, 7:30 Contact Ron Peters at 780-0963. **Sterling,** Sterling Library, 7:30-9:30, 1st Wed. Contact Milo Flagel at 471-5273.

A.U.R.A.

Atari Users Regional Association

President.....Steven Rudolph 301-464-0835
8-bit VP.....Bob Langsdale.....301-390-6554
16-bit VP.....James Bonbright,Jr ..301-933-4891
Membership.....Dave van Allen 301-593-4654

Meetings - Third Thursday of each month in the Multipurpose Room at GRACE EPISCOPAL SCHOOL. The school is on the east side of Conecticut Avenue, 1/4 mi. north of the Connecticut Avenue (North) Exit from I-495. Library sales begin at 7:00, the meeting begins at 7:30.

Correspondence. All correspondence, including membership renewals, changes of address, etc. should be sent to: AURA, P. O. Box 7761, Silver Spring, MD 20910. AURA cannot guarantee *Current Notes* subscription fulfillment unless the member provides written confirmation of address changes, renewals, etc. to the address given above.

New Members. Dues are $25/year and include subscription to *Current Notes*. Send name, address, phone number, and check to above address.

W.A.C.U.G.

Woodbridge Atari Comp. Users' Group

President.....Lou Praino.....703-221-8193
First VP .....Arnie Turk 703-670-2547
8Bit VP .....Darrell Stiles 703-494-9819
ST VP.....Bill Parker 703-680-3941
Secretary.....Frank Bassett.....703-670-8780

MEETINGS: 7-9PM, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Entering Woodbridge from either North or South on Route 1, proceed to the intersection of Route 1 and Opitz Blvd. (opposite Woodbridge Lincoln-Mercury). Turn West on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building. Meeting Dates: Nov 22, Dec 20.

NEW MEMBERS: Initial membership fee is $10/yr plus $1 monthly dues. Membership includes a subscription to *Current Notes*. Join at meeting or send check, payable to WACUG, to Frank W. Bassett, 15313 Blacksmith Terr, Woodbridge, VA 22191.

ARMUDIC BBS

703-573-9207

300/1200/2400 Baud, 8 and 16 bit

Access to the BBS requires a fee in addition to the dues. This fee is $5/year for NOVATARI members and $7.50 for members of other user groups. BBS access fees are to be made payable to "NOVATARI" and sent to: Ed Seward, PO Box 2699, Merrifield, VA 22116.

S.M.A.U.G.

So. Maryland Atari Users' Group

President.....Herb Scott.....
Secretary.....Fred Brown 301-645-4009
Treasurer.....Samuel Schrinar 301-843-7916

MEETINGS: 2nd Thursday, 7:30 pm, John Hanson Middle School in Waldorf, MD. Traveling thru Waldorf either east or west on Rt 5, exit on Vivian Adams located 200 ft west of Waldorf Carpets & Draperies and directly across from the Village Square sign.

NEW MEMBERS: Membership dues are $20 and include a subscription to *Current Notes*. Join at the meeting or send check, payable to SMAUG, to Sam Schrinar, 2032 Alehouse Court, Waldorf, MD 20601.

F.A.C.E.

Frederick Atari Computer Enthusiasts

President.....Chris Rietman 301-791-9170
Vice President.....Mike Kerwin.....301-845-4477
Treasurer.....Buddy Smallwood 717-485-4714

MEETINGS: 4th Tuesday, 7 - 9:30 pm, Walkersville HS, MD Route 194, 1 mile north of MD Route 26 (Liberty Road). July and August meetings will be held at St Paul's Lutheran Church, 14 W. Pennsylvania Ave, Walkersville, MD.

NEW MEMBERS: Dues are $25/year/family and include a subscription to *Current Notes*. Join at meeting or send check, payable to FACE, to Buddy Smallwood, PO Box 2026, Frederick, MD 21701.

M.A.C.C.

Maryland Atari Computer Club

President.....Jim Hill.....301-461-7556
Vice President.....Dan Honick 301-356-6453

MEETINGS: last Tuesday, 6:30 pm, Pikesville Library, 1 mi. east on Reisterstown Rd from Exit 20 off the Baltimore Beltway.

NEW MEMBERS: Club Dues are $24/year and include a subscription to *Current Notes*. Join at meeting or send check, payable to MACC, to James Hill, 8591 Wheatfield Way, Ellicott City, MD, 21043.

This month's new look for the Club Corner is designed to allow more flexibility in the way the WAACE confederated clubs use the space provided by *Current Notes*. The club listings have been shortened to allow space for more feature articles and notices. Meeting announcements, etc., have been separated from the club information listings to make it easier to use fresh material each month.

G.R.A.S.P.

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Meetings: 2nd and 4th Thursday at La Prade Library, 2730 Hicks Rd.

Dues: $20 per year (no *Current Notes*).

GOINGS ON – November '88

AtariFest Thanks

By Gary Purinton, WAACE President

I want to thank all of you for your hard work and talent, which resulted in a tremendous show! We gave out 2901 tickets, which was near our projection of 3000. The vendors appeared to be happy, although most of the sales were in software. The tremendous bargains available included monitors for $99 and a laser printer for $995.

The best compliment we can give the show is to say that it was worth all of the work that you put into it!

NOVATARI

by Georgia Weatherhead

Now that the FEST is over and we have had six weeks' rest (or fun trying our new toys bought at the FEST), it is time to meet and compare notes. Bring your spectrum portraits on your MACC disks made at the FEST and we shall exchange pictures. It will be like signing year books.

Please return brown ATARIFEST aprons. 18 small and 3 big ones are missing. Keep the yellow staff button.

The FEST provided a source of many great door prizes for the next six months. If you missed your heart's desire at the FEST, you may have another chance at the meetings. Not all of the new members will attend because some of them live several states away, but we welcome all of you in driving distance. 54 new members signed up at the FEST.

The WORD PERFECT deal for members ($155) is good through Dec. 30. You must have proof of User Group membership through me. Pick up your form from me at the November or December meeting. (Call me if you can't come and I'll mail a form out.)

It is time to think of the directions we wish to take in '89. More telecommunications? More games? More productivity? More show biz? More technology? LESS? Be prepared to express what you are looking for from Novatari. Yes, YOU. Not what you think others want. What is it YOU want?

Elections will be in December. A great slate is ready to be announced at the November meeting. There are lots of places for new blood within the Special Interest Groups.

Kimberly Scott will be running the Kid SIG in the hall using the club XL and a library full of public domain and some commercial software.

AURA

By Stephen Rudolph

Our November meeting will be on the 17th. Disk sales and our famous flea market will open at 7:15 pm. Our theme will be spreadsheets and their applications.

Our December meeting (on the 15th) will offer Games. We have a special door prize for December.

Our September theme was education and the SAT's. The October meeting covered databases. If you are having problems bring your disks and we will give it our best shot. Your questions are always welcome. We have power users on both the ST and the XL/XE sides. We will make time after the meetings for tutorials. One on one instruction can be arranged to help new users get started.

Future directions for AURA will be a discussion topic at both the November and December meetings. If you are interested in the group and want to take part in planning its future you will have to attend!

Jim Bonbright and John Barnes have developed new AURA disks for ST users. The three disks contain indexes to the public domain software from ***Current Notes,*** ARMUDIC, and GENie. Pick up your copies soon.

What is WAACE?

By John Barnes, Club Corner Editor

WAACE is a confederation of user groups near Washington, DC that was originally created to publish ***Current Notes*** Magazine. In the early days the collaboration between the groups was largely informal and the WAACE banner was mostly symbolic. Since the privatization of ***Current Notes*** in 1987, WAACE has primarily concerned itself with the AtariFest computer shows.

Given the need for continuity that has arisen because of the year–round character of the show planning activities and because the burdens of operating the shows are too much for one group, even one as active as NOVATARI, WAACE affiliation has become more formal. Member clubs signify their participation by annually submitting lists of WAACE delegates and club membership rosters. The number of delegates from each club is determined by the size of its membership.

As WAACE matures it may become more of a resource to the clubs by providing a forum to exchange ideas for promoting user group activities or by providing database services for club membership secretaries. The organization is founded on the principle that everyone gains by sharing experiences and effort. New groups who share WAACE's goals are welcome to join.

Further information on the WAACE Constitution and its officers is available on ARMUDIC or from Gary Purinton, the current WAACE president.

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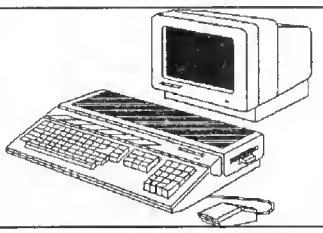

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